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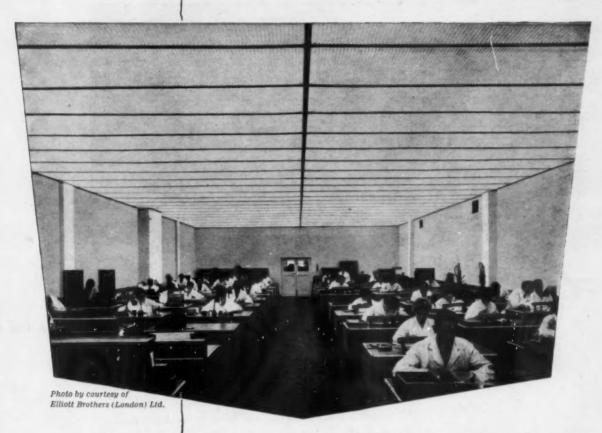
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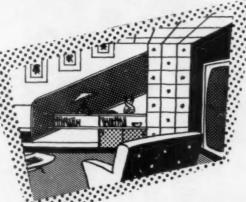
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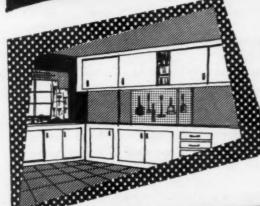
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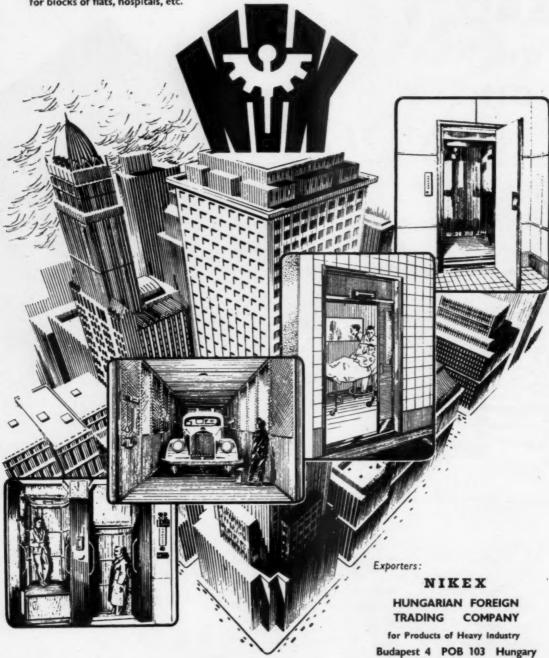
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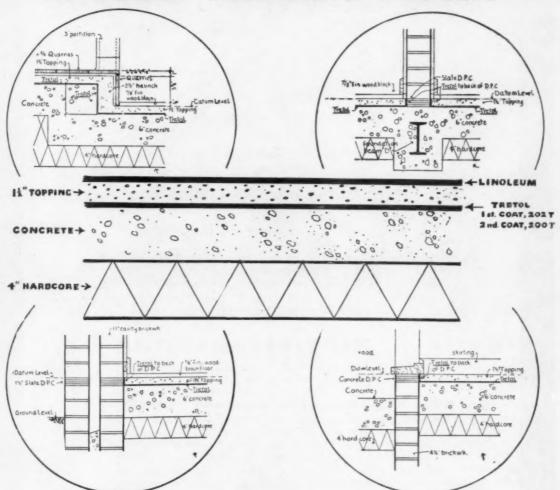


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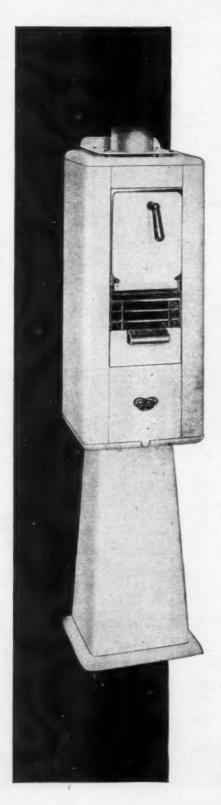
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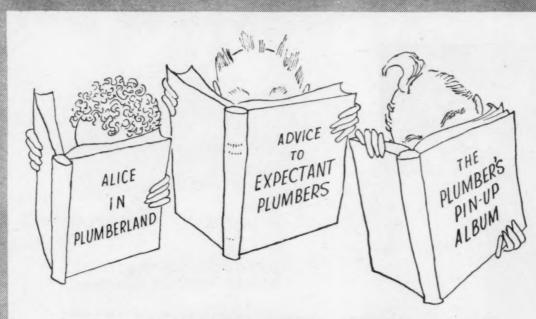
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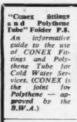
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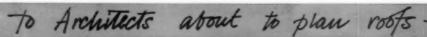


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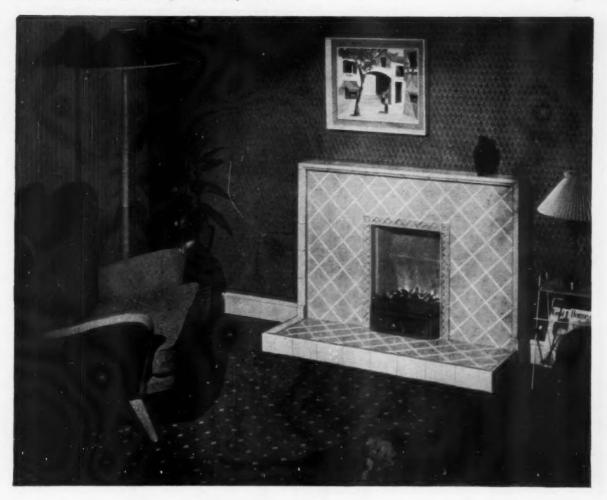
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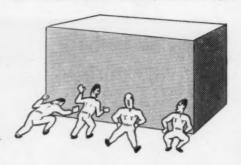




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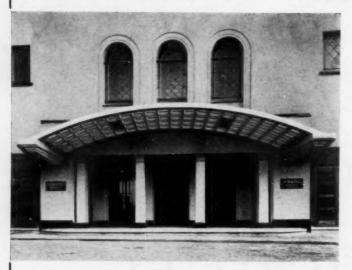
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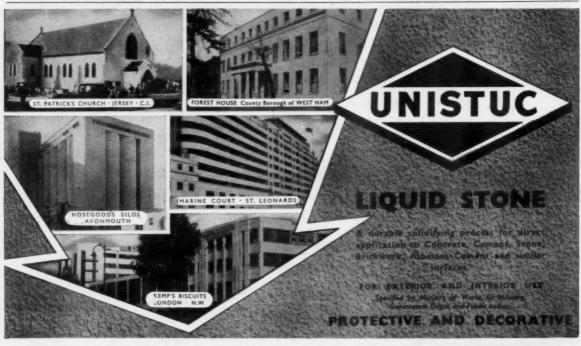


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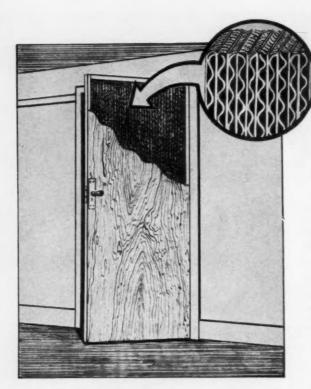












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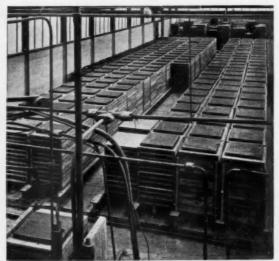
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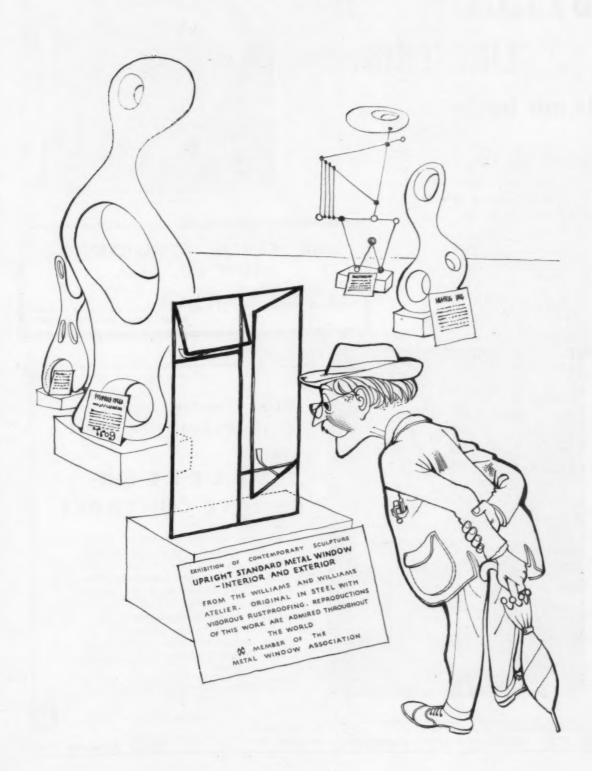




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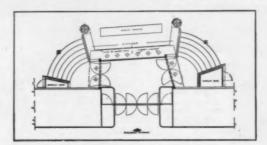
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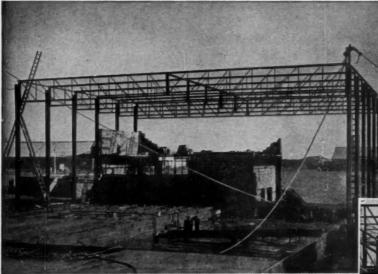
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Vol. 209 No. 16

April 19, 1956

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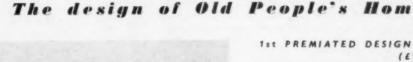
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A.B.S. COMPETITION RESULT The design of Old People's Homes



2nd PREMIATED DESIGN (£75 shared)

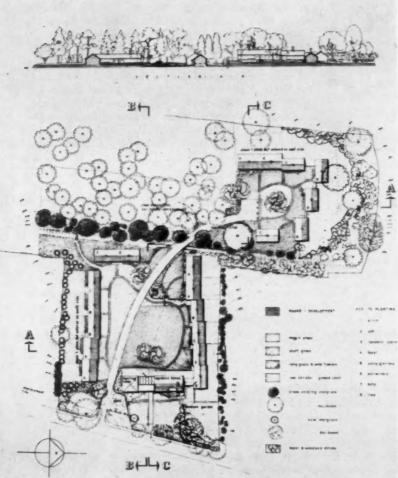
Clifford Culpin & Partners, No. 22

Robert Davison & Andrew Artur, No. 8, tied with Douglas Lanham & Eric Barker, No. 32.

COMMENDED DESIGNS
Michael Hennings.
Miss P. F. G. Cavanagh and
S. D. Dray

THE whole scheme envisages a group of twenty dwellings, a warden's house and a tenant's common room on a pleasant site at East Horsley, Surrey. The fund to provide these dwellings stands at present at £23,000; half what will ultimately be required to complete the scheme. The Architects' Benevolent Society, however, propose to make a start on the scheme by building six dwellings and a portion of the warden's accommodation. The designs submitted in the competition are for the whole scheme. The object of the competition was to obtain a design which will provide, imaginatively and economically, living conditions for various types of dwellings for old people in self-contained homes.

The Promoters appointed the following to act as assessors of the competition: Mr. H. S. Goodhart-Rendel, C.B.E., F.R.I.B.A., Mr. Arthur W. Kenyon, C.B.E., F.R.I.B.A., M.T.P.I., Mr. G. Grenfell Baines, A.R.I.B.A., A.M.T.P.I.



Winners' Layout

BVENTS AND COMMENTS

GOLD MEDAL EVENING

There was a packed house for the presentation of the Royal Gold Medal to Dr. Walter Gropius. I don't recall such an enthusiastic throng since the evening Corb was similarly honoured.

Sir Howard Robertson and Sir Percy Thomas escorted Dr. Gropius, wearing his characteristic narrow bow tie, to the platform.

The speakers who delivered the eulogies, Sir Herbert Read, Professors Holford and Pevsner, Mr. J. M. Richards, Dr. Leslie Martin and Mr. Maxwell Fry, created between them the atmosphere commensurate with the occasion, and together with the tumultuous applause and, of course, the Medal itself, assured Gropius of our deep admiration for the great integrity and discipline of his life and work. He has indeed lived out his dictum that "modern architecture is not a few branches of an old tree—it is a new growth coming right from the roots".

Doubtless you will have an opportunity of reading the speeches in full and Gropius' dignified and modest reply in which he did well to remind the younger members present, and I should say they were the majority, of his early struggle for recognition. He also revealed that he was designing the American Embassy in Athens. Good for the U.S., who also employed Saarinen in Grosvenor Square and, I believe, Edward D. Stone in Delhi on their Embassy buildings.

The presence of Walter Gropius among us once again has generated a renewed enthusiasm and I hope he found time to re-visit Impington and also have a look at some of the things we have done since his pre-war partnership days with Max Fry.

The small exhibition of photographs of the Master's work starts with the Fagus Factory (1911) and ends with the Overholt Thoracic Clinic, Boston (1955).

As J. M. Richards said so well, there are many people of whom it can be said that he is a man of his time, but not so many of whom it can be said that his time is very much what he has made it.

WALTER GROPIUS DINNER

On Thursday evening, members of the Architecture Club and the friends of Dr. Walter Gropius held a dinner in his honour at the Ironmonger's Hall, Aldersgate in the City. One of my spies writes: "the company was not a large one, but contained an unusual number of well known people, among the industrial artists, designers, architects, planners, engineers and scientists who were presided over by Lord Esher.

"The dark panelled hall with ornate ceiling, stone walls and fine candelabra was just the right choice for this occasion, being not too large to lose a sense of intimacy. The scene was warm and slightly mediaeval.



Dr. Gropius wearing medal replies to the eulogies

Grace was sung. The meal was remarkable for rather tough lamb and excellent vintage port.

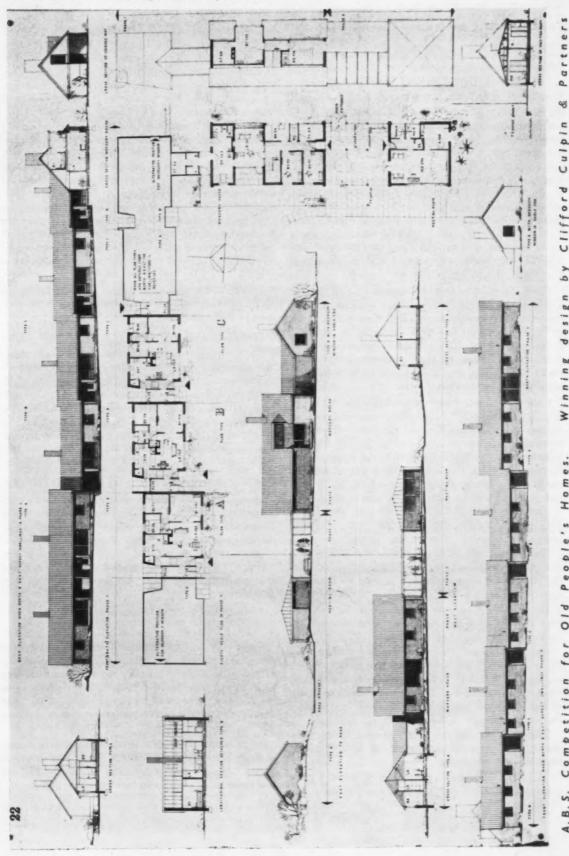
"The five speakers who proposed the toast of Dr. Gropius: Geoffrey Dunn, Maxwell Fry, Dr. Julian Huxley (who presided at the dinner to Walter Gropius before he went to America 20 years ago), Henry Morris, and J. C. Pritchard, all spoke with nostalgia of the Master's departure to America before the war. In his response, Dr. Gropius recalled his feelings when he left England and referred to some of his old friends—H. G. Wells, Professor Reilly and others. At the end of the dinner a short recitative in praise of Dr. Gropius was sung in harmony by Cyril Mardall, Jeremy Pritchard, Anthony Harris, Miss Judith Jackson and Richard Venables."

THE A.A. RECEPTION

Although the general arrangements of the Annual Reception at the A.A. seem to be controlled by tradition and the shape of the building, the organisers always manage to provide something new and interesting. Although the Council may sometimes think up the ideas the organisation is almost entirely in the hands of the permanent staff. The re-arrangement of rooms and the moving of furniture before and after the evening is a tremendous task and yet by lunch-time on the day following the reception hardly a sign of the great event remains.

The President, Mr. Bryan Westwood, and Mrs. Westwood received the guests in the library. Both Mr. and Mrs. Westwood seemed to be enjoying themselves hugely and this provided an excellent start to the evening. It was a rainy night and guests were slower than usual in arriving, mainly because traffic in the West End was well knitted up. About 800 people attended but there was no feeling of overcrowding except from time to time in the main bar and the Council Room. Sir John Rothenstein arrived quite early and showed no signs of what must have been a tiresome

Continued on p. 390



Winning design by Clifford Culpin & Competition for Old People's Homes. A. B. S.

Events and Comments (continued)

day looking for the vanished Berthe Morisot. I was able to apologise in person to Mr. Aslin for referring to him last week as Mr. Asplin.

As usual I missed many friends who were there; all the same at the end of evening post-mortem over coffee and bacon and eggs it seemed that quite a lot of people, normally keen supporters, were absent. What fun these post-mortems are. To begin with, one is sitting down for the first time for four or five hours, a pleasant sleepiness descends to be dispelled by the reviving food and non alcoholic drink. How charitable we all become—Lord, did you see her dress? Where could she have found it? Ran it up during the afternoon I should think. Of course, what he needs is a good scrub, and that woman with him, who was she? My dear, he was terriby nice to me, I think he must have been tight. And so on, and so on.

For my taste there were far too many short dresses. This is not to say that some of them were not good of their kind but I prefer them long. Many people came on from the Architecture Club dinner to Dr. Gropius. Reports on dinner and speeches varied a good deal, from ecstatic praise to faint condemnation. On the whole opinion said that it was quite an occasion with Maxwell Fry contributing in verse.

I am very bad at doing the side-shows at the reception, but I did see the Thames Barge exhibition—a tribute to an ex-barge owner president—which was interesting and instructive as well as pretty. National Maritime Museum had a big hand in this show and the director, Mr. F. G. G. Carr, and the keeper of the ship models, Mr. George Naish, were among the guests. George Naish and I fought side by side in the defence of Flotta and Scapa Flow during the war, where he at any rate kept a special look-out with a pocket monocular.

The photographs of Greenwich in the 80's all had that charming atmosphere of poise and quietness which the posed time exposure always seemed to impart to early photography.

The nautical and seaside decorations in the main hall were above average as were the charming arches on the stairway leading to the reception.

The A.A. theatre group put on a show called "The Three Brothers"; the setting was Maidstone where a regiment of W.R.A.C. were temporarily stationed. John Smith, the indefatigible, did it and it was very funny, in fact it was the best reception dramatic performance for some time.

There was no quiz this year but some screens illustrating A.A. post-graduate work on town planning filled the gap admirably.

As I write this some 12 hours after the event, I know from the way I feel that it was an excellent party, one of the best.

COVENT GARDEN AND SYDNEY

I hope that the damage to the Floral Hall at Covent Garden market will not mean the destruction of this fine glass house. If and when the market moves I suppose it will go anyhow. It looks very miserable now with its ribs blackened and much of its glass shattered. I had not realised how serious the threat to the Opera House was for they almost touch.

The Sydney competition makes me very envious. I hope that Australian opera goers will appreciate how lucky they are if the winning design is built. Fond as I am of Covent Garden it has many shortcomings and it is astonishing how few seats give a comfortable and uninterrupted view of the stage. At the ballet the other night I was once more depressed and impressed by the very large numbers of foreigners present. It gave me the impression, perhaps wrong, that the promotion of ballet and opera in this country would be an even riskier business financially if it were not for our visitors and emigrés.

The A.A., always on the ball, is having a discussion on opera houses led by Mr. Hope Bagenal, while this issue is at the printers.

GOOD FOR THE S.I.A.

The Society of Industrial Artists is sending an exhibition of graphic design to Budapest at the invitation of the Hungarian Institute of Fine Arts. The work of 63 members of the society will be represented by posters, book jackets, book illustrations, package designs, brochures, etc. Mr. David Captan has organised the exhibition and will go to Budapest in June for the opening. It would be nice if we too could see this exhibition.

CANNON STREET CORRECTION

Messrs. Clifford, Tee and Gale, architects, write that the steelwork which I saw at Cannon Street Station is to support some temporary offices and has nothing to do with a new roof. The whole matter is being brought to the notice of the R.F.A.C. by the architects in due course. This is the first intimation that I have had that my old chums, B.R., did not do all their own architecting.

I am sorry for my error.

TAILPIECE

There was another dinner this week at which some remarkable singing took place, with literally shattering results. *The Evening Standard* reported that Miss Victoria Elliott, soprano from Sadler's Wells who sang at the Builders' Benevolent Institution dinner at the Dorchester on Tuesday, cracked a brandy glass or two with her top note.

At the same dinner, Mr. Derek Walker-Smith, Parliamentary Secretary to the Board of Trade, was quoted as saying "He was neither a builder because he had not had the training nor was he benevolent."

ABNER

NEWS

Building Wage Increase

At its meeting on April 5 the National Joint Council for the Building Industry, following Award No. 818 of the Industrial Disputes Tribunal, decided that the standard wages rates of building trades operatives should be increased by 21d. per hour as from Monday, April 16, 1956.

Crawley New Town **Annual Meeting**

The Corporation held its customary meeting with local elected representatives at the George Hotel, Crawley, last Saturday, when the Chairman, Sir Thomas Bennett, reported on pro-

There has been considerable further progress on housing during the year; also on the industrial side, where the Corporation's third lot of standard factories show an interesting advance on previous groups, and several individual factories have been completed or are approaching completion.

The two neighbourhoods where most concentrated development has taken place during the year are Ifield and Pound Hill. At Ifield the Neighbourhood Centre is taking shape with the completion of the shopping and County Secondary Schools. Housing at Pound Hill South has been carried out by nominated architects, Messrs. Norman and Dawbarn; the shopping centre was designed by the Chief Architect's Department, and the Church by Mr. Arthur Kenvon.

The development of the southern half of the town is proceeding; the first stage of the Town Centre is complete, and the second stage is now

taking shape.

In Parliament

Prospect of St. Paul's

When Parliament reassembled after the Easter recess the model of Sir William Holford's development plan for the St. Paul's area was on exhibi-tion for members of both Houses to

It produced an immediate and critical reaction. A motion, sponsored by Sir Alfred Bosson, appeared on the House of Commons order paper the following day in these terms

63. REDEVELOPMENT SCHEME AROUND ST. PAUL'S CATHEDRAL: That this House urges the Minister of Housing and Local Government to withhold his approval of any scheme for the redevelopment of the land around St. Paul's Cathedral which would contrast undesirably with the Cathedral, detracting from its dignity, obliterating the view of the Cathedral from many

directions, and cluttering the surrounding area with buildings of outline; to forbid the irregular addition of irrelevant structures, such as Temple Bar; but, instead, to take the utmost advantage of the present unique and unrepeatable opportunity to keep the space around the Cathedral open and free of unrelated buildings, such as those marked (a), (b), (i), and (h) on the plans now on view in the House, and also the Choir School at the east end of the Cathedral, so preserving for future generations the finest gem of England's greatest architect in an appropriate setting.

It was supported by more than 40 members in its first appearance, and by the end of the week the number was approaching 70.

National Library Project

The project for building a new library for the British Museum in Bloomsbury was discussed on an adjournment motion in the House of Commons on April 10. Mrs. Lena Jeger complained of the uncertainty of tenants in the area affected, and also of the general nature of the plan. It is proposed to take 7½ acres bounded by Bloomsbury Street. bounded by Bloomsbury Bloomsbury Square, Bloomsbury Way, the north side of New Oxford Bloomsbury Street, and Great Russell Street.

There are on the site 126 commercial buildings in full use, 13 buildings scheduled as a historic or architectural interest, 184 flats, two hotels and a hostel. The occupiers, Mrs. Jeger hostel. claimed, should be assured about their future. She was critical of the idea that all the books that the British Museum must keep should be stored in central London, and said that fur-ther study could produce a more economical and more imaginative plan. The present plan was Victorian in conception and belonged to the age or sprawl when labour and space were cheap and expendable.

Mr. J. R. Bevins, Parliamentary Secretary to the Ministry of Works, told her that it was intended that the scheme should be carried out over a considerable period. The designated site must be acquired before 1965, and that would be done. That did not mean that the whole area would be developed within that period, or even within 20 years. Land not needed in the near future, perhaps within 10 years-and that would be the bulk of it-would be handed back and the occupiers on tenancies of appropriate duration according to the period when it was envisaged that it would be developed. The first stage of development, the area west of Coptic Street, would not take place before about 10 years from now. They did not expect the second stage to start for at least 20 years, and it was likely to be later than that. The rehousing of the people dispossessed was not a difficulty likely to arise in an acute form within the next 10 or 15 years. To preserve the character of the area it was desirable to make some provision in the frontages of the area as redeveloped for bookshops, and perhaps other shops.

This question was very much in mind, but it was too early yet to say how much could be done in this way. The Minister and the British Museum Trustees were acting in complete harmony. It was essential that the Library should be housed inside the Museum or in an area close to it. The possibility of putting some of the less important documents outside London had been considered, but was not a feasible proposition.

St. James's Park Bridge

The anonymous bequest of £20,000 for a new bridge over the lake in St. James's Park has been accepted. The Minister of Works announced on April 10 that the response to the statement he made a month earlier had been clearly favourable.

At that time Mr. Buchan-Hepburn said that informal soundings he had taken had shown that opinion was in favour of a new bridge, for which the Chief Architect of the Ministry had prepared a design. The Royal Fine Arts Commission thought the existing bridge should be retained in spite of the need for essential repairs and the cost of maintenance.

Announcement

Messrs. Norman and Dawbarn, architects and consulting engineers, have closed their offices at 5 Gower Street, W.C.1, and at 3 Bayley Street, W.C.1, and opened their new office, to which all correspondence should be addressed, at 7 Portland Place, W.1, on Monday, April 16.

COMING EVENTS

The Housing Centre Trust

April 24 at 6 p.m. "Housing in Chile and in Latin America Generally," René Urbina, Architect of the Ministry of Public Works and Housing Institute of the University of Chile. At 13 Suffolk Street, S.W.1.

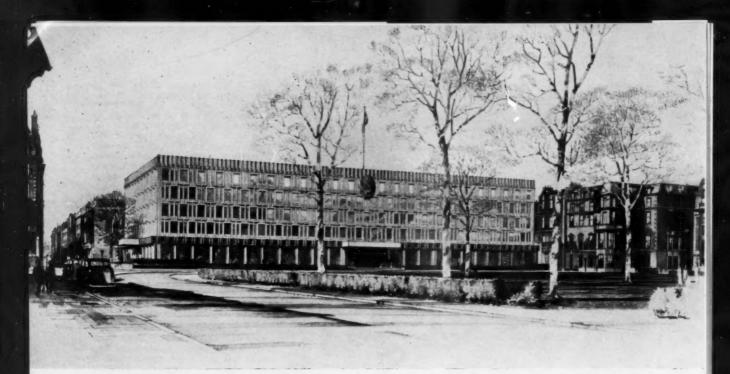
The Architectural Association

April 25 at 8 p.m. A.A. General Meeting. "Coventry Looks Ahead," by Arthur Ling. Dinner at 7 p.m. Dinner seats must be reserved in advance (7/6). At 34 Bedford Square,

April 28. A.A. visit to L.C.C. Picton Street Housing Scheme (Architect to the Council, Dr. J. L. Martin). The party will travel by coach from Bedford Square leaving at 10 a.m. Tickets 3s. 6d. each.

The Institution of Structural Engineers

April 26 at 6 p.m. "Design and Con-Debden," by Sir Howard Robertson,
Ove Arup, R. S. Jenkins and H. F.
Rosevear. At 11 Upper Belgrave Rosevear. At Street, S.W.1.



From east

WINNING DESIGN
FOR U.S. EMBASSY
GROSVENOR
SQUARE

THE winning design in the competition for a new Embassy conducted by the Foreign Building Operations of the U.S. State Department, was won by Eero Saarinen and Associates of Bloomfield Hills, Michigan. The competition was a limited one with Robert W. McLaughlan of Princeton, New Jersey, appointed to prepare it. Architects invited to compete were: Anderson and Beckwith, Ernest J. Kump, Eero Saarinen, José Luis Sert, Hugh Stubins, William W. Wurster and Minoru Yamasaki. The jury consisted of Pietro Belluschi, F.A.I.A., George Bain Cummings, F.A.I.A., Loy W. Henderson, Deputy Under Secretary of State; William P. Hughes, Director of Foreign Buildings; Livingston T. Merchant, Assistant Secretary of State; Henry R. Shepley, F.A.I.A. and Ralph T. Walker, F.A.I.A.

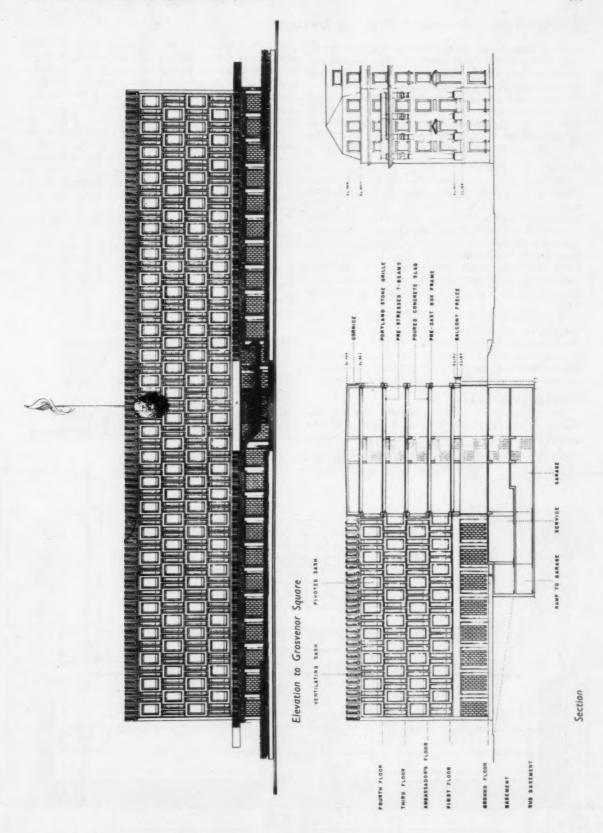
All drawings submitted were unsigned and final selection was by secret ballot. A fee of 4,000 dollars was paid to each of the competitors who were obliged to visit the site.

The U.S. Congress have approved the sum of 3 million dollars for the building and both English and American contractors will be invited to tender. Construction should start in January 1957.

Competition Conditions

The competition conditions contained a statement of policy drawn up by the State Department to influence the competitors in their design and in order that the result should be a building that "would represent the best of progressive architectural thought in America today."

The policy was to provide adequate facilities as required; in an architectural style and in a form which was to be distinguished and which would reflect credit on the United States; at the same time goodwill was to be created by intelligent appreciation, recognition and use of the architecture appropriate to the site and to the Country. Major emphasis was to be placed on the creation of goodwill in the country by the design of the buildings, rather than adherence to any particular architectural style. Design was to follow established good practice and use was to be



U.S. Embassy, London, Winning Design

made of construction techniques, materials, and equipment of proven merit and reliability. The building will occupy and will visually establish one side of the Square. Its visual relationship to the other three sides as well as to the surrounding area of London was considered to be of the utmost importance. The programme called for a minimum of detailed planning of internal spaces, so as to permit maximum study of the form and character of the American Embassy in London.

Design Conditions

The building is fundamentally an office block with a maximum of 150,000 ft sq floor space divisible into three areas, each with a separate entrance. The central area was designed to be not more than 121,500 ft sq and includes an entrance hall (1,000 ft sq) offices for the Ambassador and staff (1,675 sq ft) for the Deputy Chief of Mission (800 ft sq) for the Political Councillor (2,000 sq ft) and a 600 ft sq conference room. The Ambassador's office was planned with direct entry or entry through private corridors, from all the above offices. This suite is on the second floor.

The second area is devoted to consular and visas activities and is 15,000 ft sq. The United States Information Service occupies the third area of 13,500 ft sq.

In the basement of storage, services and a cafeteria. A sub-basement provides parking for 25 cars. The building will not be air conditioned.

External Treatment

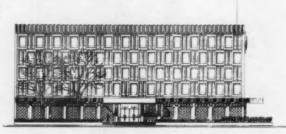
The building which is 330ft long, 230ft deep and 71ft high, is to be clad mainly in Portland Stone. On the ground floor will be a low surrounding wall with hedges.

The main feature of Mr. Saarinen's facade is a giant stone grille. The perforations, or windows, of this structural grille carry through the same rhythm of window spacing as the surrounding buildings and give a richness to the facade. The Portland stone facing has also been used to take advantage of the dramatic black-and-white weathering which characterises London.

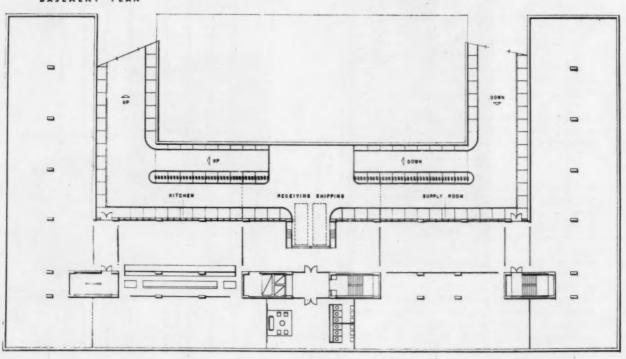
First floor windows are screened by a small-scale natural bronze protective grill. Above the windows is a frieze of black oxidized bronze squares which will bear in low relief, the U.S. State Seals. The cornice is sand moulded and black oxidized bronze. Above the Grosvenor Square entrance is a large natural bronze replica of the Great Seal of the United States.

Contained by the U-shaped plan is a landscaped, inner court and a pool.

The architect suggests later extensions by the addition of a third wing at the rear, on the central axis of the building. This would give some 35,000 sq ft of additional floor space.



BASEMENT PLAN



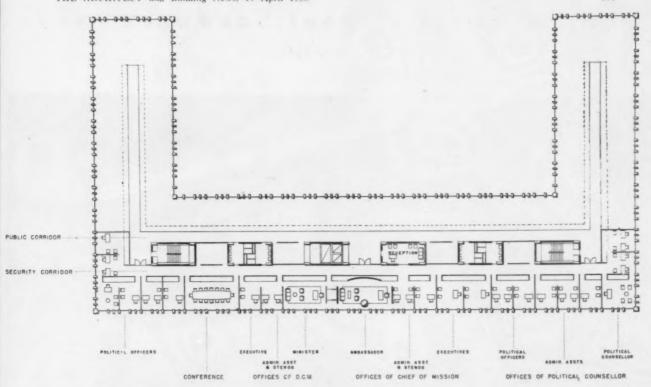
GENERAL STORAGE

CAPETERIA

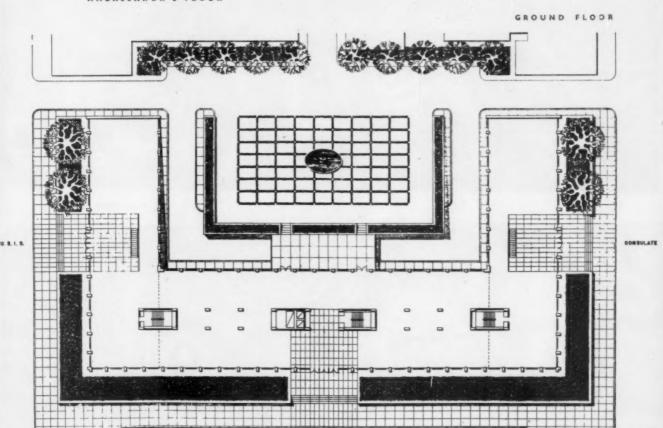
LOUNGE

WAINTENANCE

SENERAL STORAGE



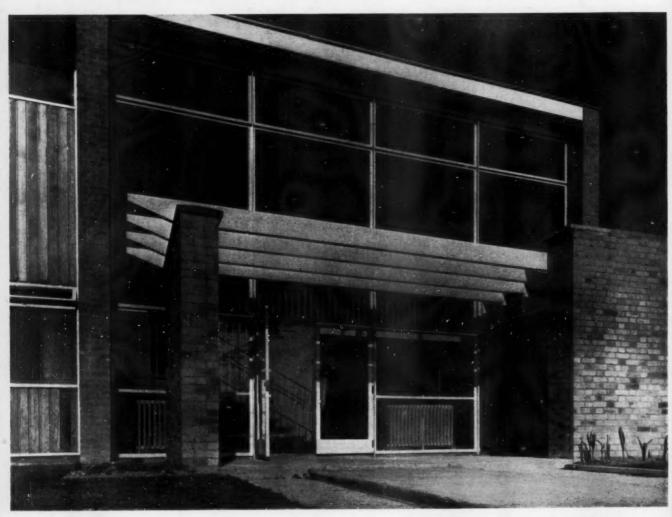
AMBASSADOR'S FLOOR



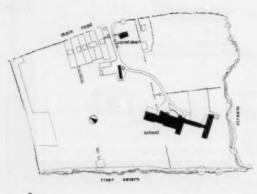
WRIBBENHALL SCHOOL, BEWDLEY for

architects: YORKE, ROSENBERG, MARDALL

associate-in-charge: T. R. EVANS



main entrance



Site

General Contractors Messrs, Y. J. Lovell and Sons

Subcontractors

Asbestos Spray: Turners Asbestos Cement Co. Ltd. Asphalte Tanking: Highways Construction Ltd. Balustrades: C. E. Welstead Ltd. Chimney and Tanks: Chimneys Ltd. Cloakroom Equipment: Cloakroom Equipment Ltd. Facing Bricks: S. & E. Collier Ltd. Glazed wall tiles: R. G. Robertson (Tiles) Ltd. Greenhouse: William Wood & Sons Ltd. Heating. H. & C. water supply and gas: J. S. Wright & Co. Ltd. Ironmongery: Alfred G. Roberts, Ltd. Joinery fittings: A. H. Guest Ltd. Metal Windows and Lantern Lights: Williams and Williams Ltd. Precast Terrazzo treads: Marbello & Durus Ltd. Roofing: William Briggs & Sons Ltd. Sanitary and Laboratory fittings: Stitsons Sanitary Fittings Ltd. Steelwork: Power's and Deane, Ransome's Ltd. Structural Timber frames and flush doors: Veneercraft Ltd. Tarmac Surfacing: Constable, Hart & Co. Ltd. Wooden Rolling Shutter: Haskins Rolling Shutters Ltd. Woodstrip and Accotile flooring: R. W. Brooke & Co. Ltd.

THE ARCHITECT and Building News, 19 April 1956

Worcestershire C.C.

supervising architect: JULIAN SOFAER

services consultants:

OSCAR FABER & PARTNERS

structural engineers:

CLARKE, NICHOLLS & MARCEL



From north

THESE buildings were scheduled for construction in the 1952/53 major building programme of the Minister of Education and comprise a two form entry, mixed, county secondary school for 300 pupils. The original estimate was £95,040 for 360 places, but the final cost after additional facilities for youth leader and general youth activities, was £98,317.

The site which lies between the Bewdley-Stourport road and the River Severn gives fines views west, south and over and down to the river. To north and east, housing development of typical unimaginative character in urban development has spoiled the view and this is one of the main reasons for siting the buildings near the river, in the south-west corner. The buildings are positioned above the high water level of the Severn as the river is liable to flood. The decision to use one corner of the ground only for the school buildings has made it easier to develop large areas of the site to north and east as playing fields.

Design

The buildings run roughly north-south and are generally two storied. On the east boundary is a caretaker's cottage that is close to, and controls, the main entrance to the school from the Bewdley-Stourport road. Running along the south end of the site is a small tributary stream of the Severn and the sloping land between it and the buildings is used by the pupils of the school for gardening. Apart from the area east of the buildings,

which is a paved playground, the rest of the site has been planted as grass and lawns for play fields or recreation.

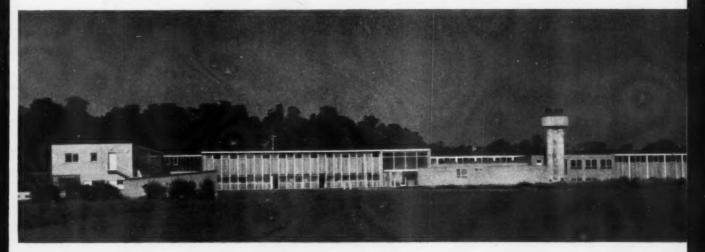
Fitting in well with the natural charm of the landscape the building plan has been allowed a certain open accent of design but such extended planning does not necessarily mean that excess circulation space results because the total area has been kept down to 73 sq ft per child.

All teaching rooms and staff rooms have predominant south or west lighting and are concentrated in the interconnected two floor wings at right angles to the river. Joined to these wings by stair halls is a lavatory and cloakroom and circulating block running N.W. and S.E. which occupies the whole of the ground floor. All these lower units have their own access from the playground. Over them, on the first floor, is the library and art room. These two rooms are central to either staff or classrooms and are accessible by staircase at either end to and from the ground floor, or by landings to the first floor classrooms.

Between the gymnasium and the hall are changing rooms which can be used by both, and which run through two levels.

There was a limiting monetary factor of £240 per child place; and to conform to this figure it was impossible to include in the design a separate dining space. Accordingly the main assembly hall is also used as a dining room and so in the plan it is connected direct to

School from east



Wribbenhall School

a one storied kitchen lying alongside its east wall. The kitchen has east light and as it faces the front entrance to the school, a curved wing wall of facings pierced by a chequered pattern of headers set wide apart, provides a screen.

The north end of the screen wall curves towards a 40ft high chimney from the boiler house which is a prominent feature of the low building line. On top of the double flue chimney is a concrete water tank clad with vertical boarding on wood battens.

Governing the positioning of the handicrafts or workshop room was the necessity for road access to stores so this room is on the east, nearest the road. Outside space is provided for working on a motor vehicle. Under the handicraft room is the boiler house and fuel store having again access to the yard enclosed by the screen wall. These rooms are only partly basement, so have natural ventilation and lighting.

Central block: construction

Load bearing brick walls internally. External walls timber frames with timber sashes and infilling panels of 1in cedar weatherboarding. Frames are 6in x 4in posts in 4ft sections bolted to internal concrete skin walls up to cill height, on ground floor. Roofs are plywood trusses supported by the timber frames and the floor is timber with herring bone strutted joists.

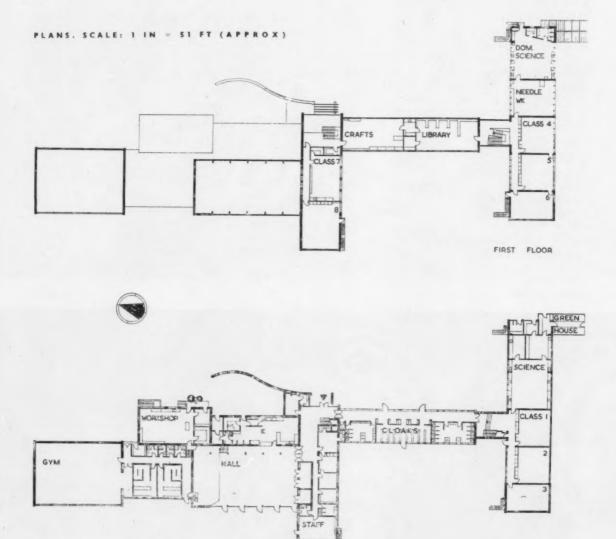
Main Hall

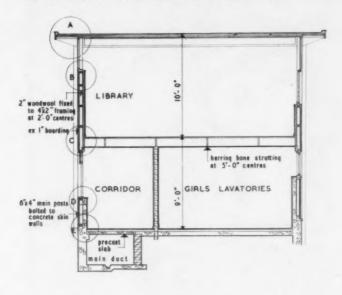
Plywood portal frames spanning 36ft 2in. Frames sit in M.S. shoes bolted to concrete floor slab. Timber framed windows with steel opening lights. Floor is strip flooring nailed to battens with dry pugging between. Roof is timber boarding with woodwool and waterproof surface made up of three layers of felt and granite chippings.

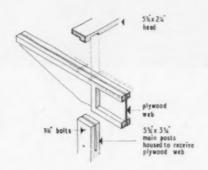
Gymnasium

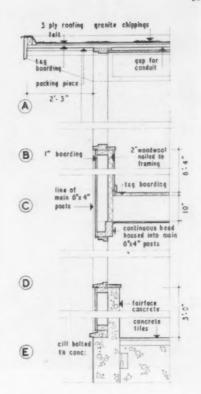
Steel columns support castelated beams and roof. Floor and windows are similar construction to assembly hall

Continued on p. 402

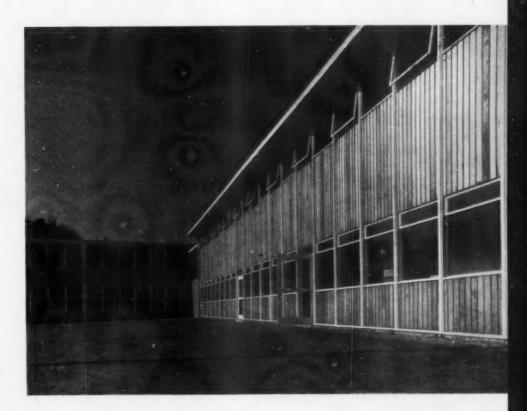




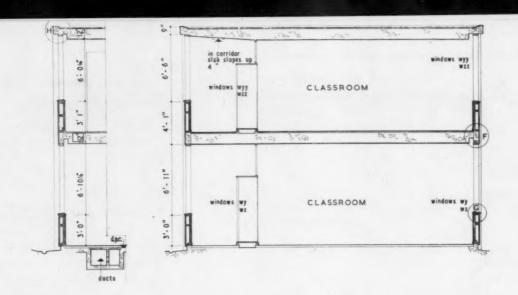


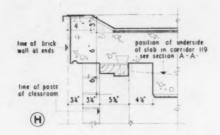


LIBRARY BLOCK, DETAILS SCALE: 1 IN = 8 FT



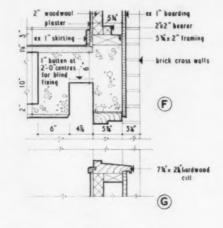
View looking south

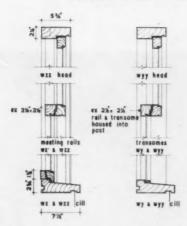


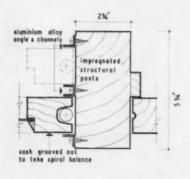


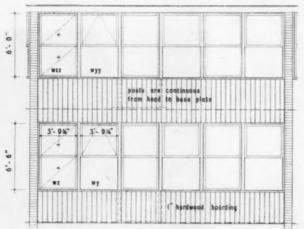
CLASSROOM BLOCK DETAILS

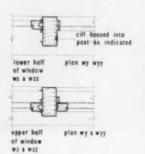
SCALE: 1 IN = 10 FT





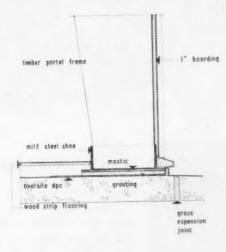




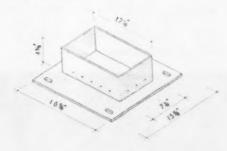




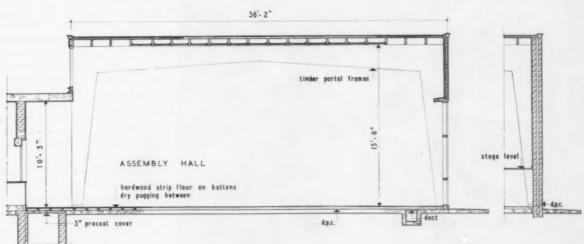
Assembly Hall

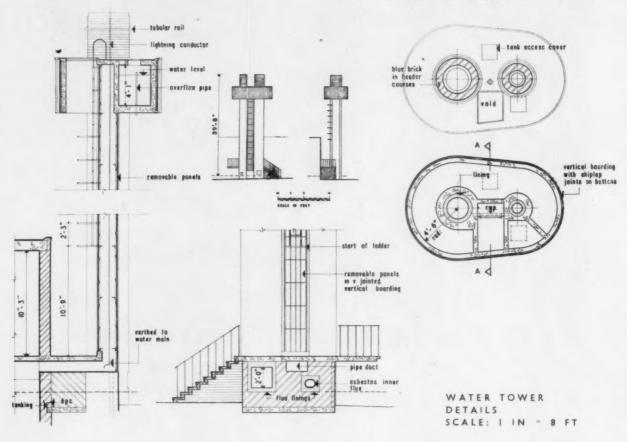


DETAILS OF SHOE

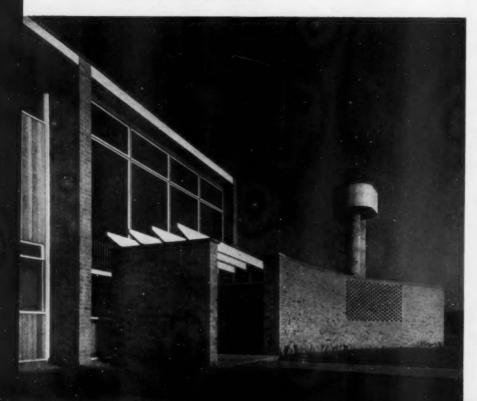


SECTION SCALE: I IN = 8 FT





Water tower and main entrance

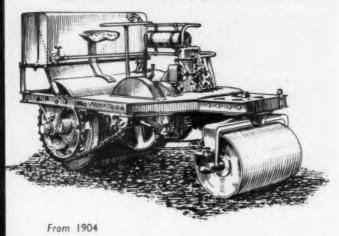


Wribbenhall School

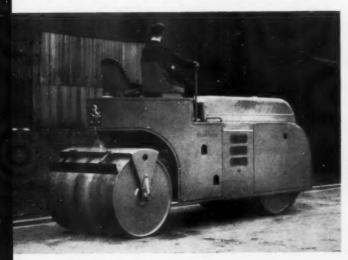
FINISHES

Facing bricks are Colliers hand made reds and the screen wall to the kitchen yard is in Hinleys buff rustics. External woodwork is white painted except weatherboarding which is red cedar left natural. Classroom floors have thermo-plastic tile surfaces and handicraft and science room have "Grænwood" tiles. Domestic science room and circulation areas on ground floor are laid with quarry tiles.

Internally, considerable areas of fair faced brick work or concrete walls are painted and ceilings are sprayed asbestos or plaster, other sides of fair faced walls are plastered and painted where exposed in teaching areas. All structural timber is impregnated.



Contractors Plant - II



To 1956

THIS article is concerned with the plant necessary for the construction of bituminous surfaced roads. It deals with the following articles of equipment: Dumpers graders, power rammers, compactors, pumps de-watering equipment, tar and bituminous macadam drying and mixing plant, spreaders, and finishers and rollers. The next article in the series will cover Domestic Gas Appliances.

Re-Cap

As a guide to readers a list is published below of previous articles in this series and the date of publication:— 16-9-54 • 9. Sanitary Appliances I. 1. Door Handles 21-7-55 2. Letter Plates, Knockers, etc. 28-10-54 • 10. Sanitary Appliances II. 18-8-55 25-11-54 3. Locks • 11. Electrical Installations 22-9-55 4. Window Furniture ... 30-12-54 • 12. Solid Fuel Fires and Stoves 20-10-55 3-2-55 5. Taps • 13. Electrical Space Heating Appliances I. 15-12-55 3-3-55 6. Doors I. • 14. Electrical Space Heating Appliances II. 16-2-56 14-4-55 7. Doors II. 12-5-55 • 15. Contractors' Plant I. 22-3-56 8. Above Ground Drainage

Above: The world's first internal combustion Tandem Roller, by Barford's and one of the latest models by Aveling-Barford, with either diesel or petrol engine, the TR class roller.

FIRMS MENTIONED IN THE ARTICLE

JOHN ALLEN & SONS (OXFORD) LTD., Cowley, Oxford. Oxford 77155

AUTO-DIESELS LTD., Cowley Mill Road, Uxbridge. Uxbridge 5681

AVELING-BARFORD LTD., Invicta Works, Grantham, Lincs. Grantham 1091

BENFORD LTD., The Cape, Warwick. Warwick 1170

BEREND & BEREND LTD., Kirkman House, 54a Tottenham Court Road, W.1. Langham 4811

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THOMAS GREEN & SON LTD., Smithfield Ironworks, Leeds 2. Leeds 20357

C. H. JOHNSON (MACHINERY) LTD., Adswood Road, Stockport. Stockport 2642

JOHNSTON BROS. (CONTRACTORS) LTD., 721 Ibex House, Minories, E.C.3.

LINER CONCRETE MACHINERY CO. LTD., P.O. Box No. 12, Park Road, Gateshead 8. Gateshead 72501 ARTHUR LYON & CO. (ENGINEERS) LTD., 6 Carlos Place, Grosvenor Square, London, W.1. Hyde Park 9141

MARSHALL SONS & CO. LTD., Britannia Works, Gainsborough. Gainsborough 2301

MILLARS MACHINERY CO. LTD., Thorley Works, Bishops Stortford, Herts.

MOTOR RAIL LTD., Simplex Works, Bedford. Bedford 4521.

FRED MYERS TRACTOR & EQUIPMENT CO., 4, Tilney Street, Park Lane, W.1. Grosvenor 7233

JACK OLDING & CO. LTD., Hatfield, Herts. Hatfield 2333

FREDERICK PARKER LTD., Viaduct Works, Gainsborough, Lincs. Gainsborough 2301

PEGSON LTD., Coalville, Leicestershire. Coalville 234

PHOENIX ENGINEERING CO. LTD., Chard, Somerset. Chard 3226.

RANSOMES & RAPIER LTD., Waterside Works, Ipswich, Suffolk. Ipswich 2143

ROAD MACHINES (DRAYTON) LTD., Horton Parade, West Drayton, Middx. West Drayton 3221

DAVID ROBERTS & CO. (ENGINEERS) LTD., 276, Monument Road, Birmingham 16. Edgebaston 2981

SIGMUND PUMPS LTD., Team Valley, Gateshead 11, nr. Newcastle-upon-Tyne. Low Fell 75051

STOTHERT & PITT LTD., Bath, Somerset. Bath 2277.

THWAITES AGRICULTURAL ENGINEERING CO. LTD., Welsh Road Works, Cubbington, Leamington Spa, Warwick. Leamington Spa 3089

TRACTORS (LONDON) LTD., The White House, Bentley Heath, Barnet, Herts. Barnet 9166

WALLIS & STEEVENS LTD.,
Basingstoke, Hants. Basingstoke 151

WARSOP POWER TOOLS LTD., 27 Regent Street, Piccadilly Circus, London, S.W.1. Regent 4632

WHITLOCK BROS., LTD., Great Yeldham, Essex. Great Yeldham 305

The "Cedarapids 60 compactor" by Iowa Manufacturing Co. of U.S.A. Distributors in U.K., John Blackwood Hodge & Co.
Ltd. Max. weight 60,000 lbs. Bare weight 30,000 lbs.





Graders

A List of Manufacturers—
John Allen & Sons (Oxford) Ltd.
Aveling-Barford Ltd.
John Blackwood Hodge & Co. Ltd.
Blaw Knox Ltd.
Fred Myers Tractor & Equipment Co.
Jack Olding & Co. Ltd.

Above: Maintenance Grader by Aveling-Barford Ltd. Engine: Fordson 42.5 b.h.p. diesel. Top speed 15.5 m.p.h. Blade: 9 ft long. Max. cut below ground 6 in and lift above ground 9½ in. Also used for bulldozing, scarifying, snow clearing and road planning.



Top right: The Allen-Oxford Grader by John Allen & Sons (Oxford) Ltd. For towing by any tractor of 20 to 30 h.p. Blade: 8 or 9 ft long. The frame can be shifted sideways to either side of centre of grader, and is clamped in position.

Bottom right: The M-52 Maintainer by Huber-Warco Co. of U.S.A. U.K. distributors, John Blackwood Hodge & Co. Ltd. Engine: 45.5 b.h.p. petrol or 40 b.h.p. diesel. Fitted with torque convertor. Attachments available for conversion to lift loading, backfiller, bull and side dozer, broom, patch roller, mower, snowplough and beam leveller.

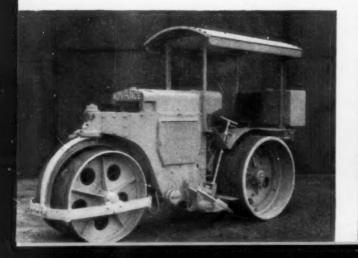


APPROXIMATE RATES OF HIRE PER 44 HOUR WEEK

Dumpers (petrol)	1000	I cu yd	£10/10/-		2 cu yd	1448	****	£16/15/-
		21 cu yd	£19/-/-	1111	3 cu yd	1111		£21/15/-
Dumpers (diesel)	1917 1773	3 cu yd	£24/5/-	1111	41 cu yd			£39/7/6
Euclid Dump Wagons		Bottom Dump	Type 13 cu	yd	vins 2000			£126/-/-
Eucho Dump Tragana		Rear Dump Typ				£11	5/-/- 4	oader £203
6 6		rear bamp if	£5/7/6				-, , -	
Power Rammers	****				2 .			CE 12 1
Pumps Single Diaphragm	2 in	1717 1117	£3/3/-		3 in	****		£5/5/-
, , , ,		4 in	£6/6/-					
Pumps Double diaphragm		3 in	£7/15/-		4 in			£9/5/-
			£4/12/6		2 in			£5/15/-
Pumps, self priming	5000 0000	la in						
(up to 25 ft heads)		3 in			4 in			£10/10/-
		5 in	£12/5/-		6 in			£14/5/-
Rollers (petrol)	- 1	Under 2 tons	£13/-/-		2-5 tons			£14/-/~
Rollers (petrol)		Over 5 tons	£15/-/-					
5 11 (11 0					5-8 tons			£19/10/-
Rollers (diesel)		Under 5 tons	£15/-/-	4.00	2-0 [0112			L12/10/-
	(Over 8 tons	£20/-/-					
Rollers (steam)		All weights	£12/10/-					
			£5/-/-					
Rollers (sheepsfoot)	mins deve							

ROLLERS

Supplier	Model	Туре	Overall Measurements L × W × H	Weight in Ibs.	Power Unit	Remarks
JOHN ALLEN & SONS (OXFORD) LTD.	Patented (single section)	Sheepsfoot	12' 8" x 4' 4" x 4' 8"	Bare: 3,304 Ballasted: 6,274	Towed by a 30/40 h.p. tractor	64 feet on each drum, either clubfoot or pyramid. Feet attached to renewable bands. May be ballasted with either water or wet sand
	Patented (double section)	as above	12'8" x 8' 10" x 4'8"	Bare: 6,372 Ballasted: 12,313	as above	as above
	Standard (single section)	as above	12' 8" x 4' 4" x 4' 8"	Bare: 2,502 Ballasted: 5,472	as above	As above, but feet welded direct to drum.
	Standard (double section)	as above	12' 8" x 8' 10" x 4' 8"	Bare: 4,769 Ballasted: 10,709	as above	as above.
AVELING-BARFORD LTD. (All "G" series rollers are fitted with patent pressure balancing de-	GA 3/4	Light roller	8' 8" x 3' or 4' x 4' 10" or 6' 10" with awning	Bare: 3,472 Ballasted: 3,836	16 b.h.p. Ford diesel	No overhanging parts, max. speed 4.42 m.p.h.
vice whereby pressure per unit under all rolls is practically equalised. Maximum pressure can	GA 5/6	as above	8' 8" x 5' or 6' x 4' 10" or 6' 10" with awning	Bare: 3,864 Ballasted: 4,228	as above	as above
also be exerted on the rear rolls.)	GFX	as above	10' 2" x 3' 10" x 5' 5½" or 7' 6" with awning	Bare: 5,050 Ballasted: 5,712	10 b.h.p. Petter diesel	No overhanging parts. Max. speed 4.12 m.p.h.
	GFW	as above	10' 2" x 4' 4" x 5' 5\frac{1}{2}" or 7' 6" with awning	Bare: 7,184 Ballasted: 7,724	as above	as above.
	GBV	as above	12' 6½" x 4' 10" x 8' 3½" with awning	Bare: 11,127 Ballasted: 12,439	17 b.h.p. Ruston-Hornsby Diesel	As above but max, speed 4.16 m.p.h.
	GCU	Medium/Heavy roller	15' 10" x 5' 0" x 9' 31" with cab	Bare: 13,950 Ballasted: 16,960	35.2 b.h.p. Per- kins or 26.5 b.h.p. Ruston & Hornsby diesel	4 speeds forward and reverse, max. 5.0 m.p.h. Can be fitted with hydraulic 2 tine scarifier. May be ballasted with sand or water.
	GCT	as above	as above	Bare: 15,800 Ballasted: 18,810	as above	as above
	GCS	as above	15' 10" x 5' 6" x 9' 5½" with cab	Bare: 17,964 Ballasted: 22,064	as above	As above, but max. speed 5.5 m.p.h.
	GDR	Heavy roller	17' 10" x 6' 2" x 10' 1" with cab	Bare: 20,400 Ballasted: 27,400	48 b.h.p. Perkins or 40 b.h.p. Ruston & Hornsby diesel	As above, but max. speed 5.0 m.p.h. and can be fitted with 3 tine scarifier.
	GDQ	as above	17' 10" x 6' 2" x 10' 1" with cab	Bare: 22,530 Ballasted: 28,660	as above	as above.
	GDO	as above	as above	Bare: 25,906 Bailasted: 33,030	48 b.h.p. Perkins or 53 b.h.p. Ruston or Hornsby diesel	as above.
	GDM	as above	as above	Bare: 30,330 Balfasted: 36,610	as above	as above.
	TRV	Tandem roller	14' 91" x 5' 0" x 7' 9" or 10' 8" with awning	Bare: 12,492 Balfasted: 18,652	42 h.p. Ford petrol or diesel or 41 h.p. Perkins diesel	Rolling width 4' 4". Max. speed, 5.10 m.p.h.
	TRT	as above	as above	Bare: 16,188 Ballasted: 22,012	as above	as above.
J. BLACKWOOD HODGE & CO. LTD. (Distributors for the Huber-Warco Company,	8 ton	3-wheel roller	16' 6" × 6' 1" × 5' 9½" or 9' 2½" with awning	Bare: 17,000	73 h.p. Hercules petrol or 62 h.p. diesel	Rolling width 5' 11". Max. speed 5.2 m.p.h. Can be fitted with 7 tooth scarifier.
Marion, Ohio, U.S.A.)	10 ton	as above	18' 3" x 6' 5" x 6' 2" or 9' 2\frac{1}{2}" with awning	Bare: 20,400 diesel plus 1,300	90 h.p. Hercules petrol or 89 h.p. diesel	Rolling width 6' 3" but 6' 7" and 6' 11" also available. Can be fitted with 7 tooth scarifier. Max. speed 5.2 m.p.h.
	12 ton	as above	as above	Bare: 24,650 diesel plus 1,300	as above	as above.
	14 ton	as above	as above	Bare: 28,150 diesel plus 1,300	as above	as above



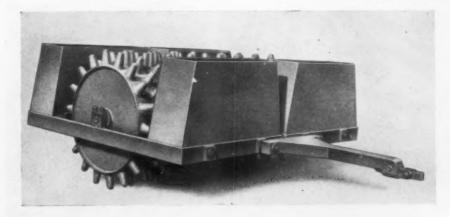


Supplier	Model	Туре	Overall Measurements L x W x H	Weight in Ibs	Power Unit	Remarks
J. BLACKWOOD HODGE & CO. LTD. (continued)	8-10 ton variable weight	3 whee! roller	16' 6" x 6' 3" x 5' 9½" or 9' 2½" with awning	Bare: 16,420 Ballasted: 20,155	Hercules 73 h.p. petrol or 62 h.p. diesel	Measurements and weights are for 20' rolls, but 22" and 24" face rolls also available. Max. speed 5.2 m.p.h. 7 tootl scarifier may be fitted.
	10-12 ton variable weight	as above	18' 3" x 6' 5" x 6' 2" or 9' 2½" with awning. Rolling width 6' 3"	Bare: 20,136 Ballasted: 24,922	Hercules 90 h.p. petrol or 69 h.p. diesel	Measurements and weights are for petro engined machines with 20° rolfs but diese engine adds 1,350 lbs and 22° and 24 face rolfs also available. Max. spee 5.2 m.p.h. 7 tooth scarifier may be fitted
	5-8 ton	Tandem roller	14' 9" x 5' 0" x 7' 31"	Bare: 11,747 Ballasted: 16,948	Hercules 48.5 h.p. petrol or 5l h.p. G.M. diesel	Max. speed 5.2 m.p.h. Rolling width 4' 2". Hydraulic steering.
	8-10 ton	as above	as above	Bare: 16,247 Ballasted: 20,901	as above	as above
	10-14 ton	as above	16' 5" × 5' 5½" 8' 0"	Bare: 20,004 Ballsted: 27,406	Hercules 72 h.p. petrol or Hercules 66 h.p. diesel or G.M. 75 h.p. diesel	Max. speed 5.7 m.p.h. Rolling width 4' 6". Hydraulic steering.
THOMAS GREEN & SON	Uniroll (two models)	Hand guided	(a & b) 7' 6" × 3' 1½" × 4' 6"	(a) 1,232 (b) 1,680	2≹ b.h.p. petrol	Max. speed 2 m.p.h. Suitable for foot- path rolling. Instantaneous reverse effected through double cone type clutch.
	DRX	Light roller	11' 7" x 3' 7" or 4' 2" x 5' 6" or 7' 5" with awning	Range from 5,600 to 10,080	10 h.p. Petter diesel at 1,500 r.p.m.	Scarifier available if required. Water ballast may be used. Instantaneous reverse effected through double cone type clutch.
	PRX	as above	as above	as above	10 h.p. Petter petrol	as above.
	PRY	Light tandem	9' 4" x 3' 6½" x 4' 6"	Bare: 3,920 Balfasted: 4,592	9 h.p. Coventry diesel	Water ballast may be used in the rear rolf. Awning available. Extra width can be obtained by using interchangeable front rolls. Instantaneous reverse through double cone type clutch.
	DRL	Medium roller	13' 3" x 5' 6" x 5' 6" or 8' 0" with awning	Range from 11,2000 to 16,800	Perkins 22 h.p. diesel at 1,200 r.p.m.	Water or sand ballast may be used. Scarifier available. Instantaneous reverse through double cone type clutch. Power units of all Green's rollers are run at slow speeds to reduce wear and tear in engine.
	DRM	Heavy roller	16' 0" x 6' 1" or 6' 6\frac{1}{2}" x 6' 6" or 9' 0" with awning	Range from 15,680 to 26,880	Lister 30 h.p. diesel at 1,200 r.p.m.	as above.
MARSHALL SONS & CO. LTD.	RD 609	Medium roller	14' 9" x 5' 4" x 6' 2" or 8' 71" with awning	Range from 13,440 to 20,160	30 b,h.p diesel	Rolling width 5' 4". Max. speed 4.25 m.p.h. May be fitted with awning or cab. May use water or sand ballast. Scarifier available.
	RD 710	as above	as above	Range from 15,680 to 22,400	as above	as above
	RD 811	Heavy roller	16' 8" x 6' 0" x 6' 9" or 8' 7" with awning or cab.	Range from 17,920 to 24,640	35 b.h.p. diesel	Rolling width 6' 0" Max. speed 3.8 m.p.h. May be fitted with awning or cab. May use water or sand ballast. Scarifier available.
	RD 912	as above	as above	Range from 20,160 to 26,880	as above	as above.
	RD 103	as above	as above.	Range from 22,400 to 29,120	as above	As above but the largest machine may not be used with ballast.
	RT 508	Tandem roller	15' 1" × 5' 6" × 6' 4]"	Bare: 13,440 Ballasted: 17,920	29 b.h.p. Perkins diesel	Rolling width 4' 4". Max. speed 4.5 m.p.h. Incorporates Rockford reversing clutches and transmission foot brake
JACK OLDING & CO. LTD. (World distributor for Onions & Sons (Levellers) Ltd.)	2-157 Compacta	Sheepsfoot roller	19' 3" x 13' 8½"x	Bare: 18,407 Drum and ballast boxes loaded: \$1,347	For use with tractors of 15,000 lb. minimum drawbar pull	Comprises two drums mounted as a pair. Each drum has tapered feet welded to the periphery and there are 36 rows each with 4 feet. May also be used with the drums in tandem. More unit may be added if desired. Sand or water ballast can be used.

Continued on p 408

Rollers

Far Left: 2½ ton "Advance" by Wallis & Steevens Ltd. Near Left: PRY tandem by Thomas Green & Son Ltd. Right: Onions 2-157 Compacta sheepsfoot roller distributed by Jack Olding & Co. Ltd.



Rollers, continued

Supplier	Model	Туре	Overall Measurement L x W x H	Weight in Ibs.	Power Unit	Remarks
JACK OLDING & CO. LTD. (continued)	3-75 Compaction	Rubber tyred roller	23' 3" × 6' 0" ×	Bare: 11,424 Ballasted: 38,424	Towed by tractor	Comprises a group of independent unit enclosed within a rectangular yoke. The yoke may be adjusted to take fron three to six units. Units consist whee and tyre supporting ballast container Tyre size 14.00 x 20 x 16 ply.
	4-75 Compaction	as above	23' 3" × 7' 9½" × 6' 10"	Bare: 14,500 Ballasted: 50,500	as above	as above.
	5-75 Compaction	as above	23' 3" × 9' 8" × 6' 10"	Bare: 17,584 Bailasted: 62,584	as above	as above.
	6-75 Compaction	as above	23' 3" x 11' 6" x 6' 10"	Bare: 20,664 Ballasted: 74,664	as above	as above.
	3-150 Compaction	as above	26' 101" x 8' 0" x 8' 6"	Bare: 23,000 Ballasted: 80,168	as above	As above but tyre size 18.00 x 24 x 24 ply
	4-150 Compaction	as above	26' 10}" x 10' 4" x 8' 6"	Bare: 29,559 Ballasted: 105,724	as above	as above.
	5-150 Compaction	as above	26' 10]" x 12' 9" x 8' 6"	Bare: 36,108 Ballasted: 131,388	as above	as above
	6-150 Compaction	as above	26' 101" x 15' 2" x 8' 6"	Bare: 42,662 Ballasted: 156,998	as above	as above
STOMERT & PITT LTD.	10 cwt Vibrating	Tandem roller	6' 5" x 2' 11" x	Vibrating roll: 784 Rear roll: 336	2½ h.p. petrol	Traction and vibration applied to front roll and steering and braking to the rear roll. Max. speed 1.25 m.p.h.
	32" Vibrating	Tandem roller	7' 118" x 3' 48" x 4' 58" x	Vibrating rol: 1,260 Rear roll: 588	5½ h.p. petrol	Traction and vibration applied to rear roll and steering and braking to the front roll. Max. speed 2.24 m.p.h.
	Power- propelled Vibrating	Hand guided roller	5' 11" x 2' 11" x 3' 11"	756	2) h.p. petrol	Rolling width 2' 4". Power transmitted to vibrator through friction clutch attached to guiding handle. Max. speed 115 feet per min.
	Hand- propelled Vibrating	-	2' 0" wide x 1' 9" diameter roll	448	1.3 b.h.p. petro:	Normally propelled by one man but auxiliary towing handle supplied for two man haulage.
	Trench Vibrating	Hand- propelled	Width I' 4 ft"	364	1.3 b.h.p. petrol	Rolling width 13" otherwise as above.
	Trailer	Vibrating roller	4' 6" wide x 2' 6" diameter roll	3,024	8 h.p. petrol or diesel	Suitable for haulage by tractor. Hand operated clutch enables vibrating gear to be disengaged.
WALLIS & STEVENS LTD.	"Advance" PG C	Light roller	9' 9" x 3' 3½" or 3' 10" wide	4,480	13.5 Morris petrol	Renewable and reversible rims give the extra rolling width. Max. speed 5 m.p.h. Awning and 2 tine scarifler if required.
	"Advance" PG/D	as above	9' 9" x 3' 61" or 4' 21" wide	5,700	as above	as above.
	"Advance" PG/E	as above	as above	6,720	as above	as above.
	"Advance" OG C	as above	9' 9" x 3' 3\" or 3' 10" wide	4,480	12.5 Coventry diesel	As above but max, speed 5.5 m.p.h.
	"Advance" OG/D	as above	9' 9" x 3' 6\" or 4' 2" wide	5,700	as above	as above.
	"Advance" OG E	as above	as above	6,720	as above	as above.
	"Advance" OMF/K	Heavy roller	14' 11" or 15' 7" with awning x 6' 0\forall " x 6' 4" or 8' 3" with awning	Bare: 13,440 Ballasted: 16,240	37 b.h.p. Ford diesel	Max speed 4½ m.p.h. May be fitted with scarifier if required. Has fully automatic cambering rear axle.
	"Advance" OMF/O	as above	As above but width	Bare: 17,920 Ballasted: 20,160	as above	as above.



Tandem Roller

The Road-Marshall RT508 tandem diesel roller by Marshall Sons & Co. Ltd.

Tampers and Compactors

A List of Manufacturers:

Compactors Engineering Ltd.
Consolidated Pneumatic Tool Co. Ltd.
Pegson Ltd.

Road Machines (Drayton) Ltd.
David Roberts & Co. (Engineers) Ltd.
Warsop Power Tools Ltd.

- 1. C.P. Triple Tamper by Consolidated Pneumatic Tool Co. Ltd. Comprises three de-synchronised RV-4 rammers.
- 2. The Vibropactor by Road Machines (Drayton) Ltd., for the compaction of 1½ in thick bituminous macadam. Incorporates 3 h.p. petrol engine.
- 3. "Benjo" power rammer by Warsop Power Tools Ltd. For the consolidation and compaction of rubble or hardcore.
- 4. The Vibrosoil Compactor type VSC2 by Compactors Engineering Ltd. For use with gravel, hardcore, etc. Incorporates 16 h.p. diesel engine. Working speed 600 sq yds per hour.
- 5. Streamlined Power Rammer by Pegson Ltd. Force of ramming blow equals 8,000 lbs. 65 blows per minute (average).
- 6. Hand propelled vibrating trench roller by Stothert & Pitt Ltd. Rolls to width of 13 ins with overall width 16% in. Weight $3\frac{1}{4}$ cwt.
- 7. The Wacker Vibro-tamper type BSSO/I by David Roberts & Co. (Engineers) Ltd. Incorporates 1.3 h.p. petrol engine.











Above: "Alcon" 2 in selfpriming petrol pump by Arthur Lyon & Co. (Engineers) Ltd. Capacity 7,000 gallons . per hour.

Below: D32, 3 in diesel self priming pump by Warsop Power Tools Ltd. Max. capacity 14,500 gallons per hour.



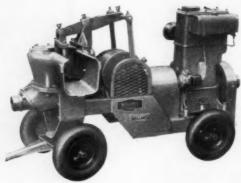
Below: CP-41 2½ in sump pump driven by rotary air motor. By Consolidated Pneumatic Tool Co. Ltd.



Pumps

A List of Manufacturers:

Auto-Diesels Ltd., Blaw Knox Ltd. Consolidated Pneumatic Tool Co. Ltd. Gilbert Gilkes & Gordon Ltd. Goodenough Pumps Ltd. Arthur Lyon & Co. (Engineers) Ltd. Millars Machinery Co. Ltd. Pegson Ltd. Phoenix Engineering Co. Ltd. Ransomes & Rapier Ltd. Sigmund Pumps Ltd. Warsop Power Tools Ltd.

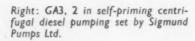


Above: 4 in single diaphragm sludge pump by Millars' Machinery Co. Ltd.



Capacity 7,000 gallons per hour

Above: No. 250 GGG 2½ in Self-priming pump by Gilbert Gilkes and Gordon Ltd.





Below: LDI, 3 in

(petrol engine) by

dia-

pump

delivery

phragm





Spreading and Finishing



A list of Manufacturers:—
John Blackwood Hodge & Co. Ltd.
Blaw Knox Ltd.
Bristowes Machinery Ltd.
C. H. Johnson (Machinery) Ltd.
Johnston Bros. (Contractors) Ltd.
Jack Olding & Co. Ltd.
Frederick Parker & Co. Ltd.
Phoenix Engineering Co. Ltd.
David Roberts & Co. (Engineers) Ltd.
Wallis & Steevens Ltd.



 The Elstree Heat-Planer by Jack Olding & Co. Ltd. Can remove up to 750 sq yds of ½ in tarmacadam per hour.

 "Spot-Mix" asphalt and bituminous mixing plant by Frederick Parker Ltd. Capacity 4½ to 10 tons an hour.

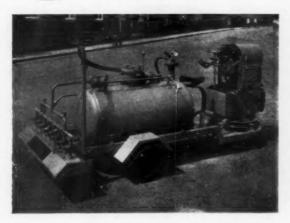
 Phoenix model F tar and bitumen pressure distributor by The Phoenix Engineering Co. Ltd. 1,000 gallons capacity on Bedford truck.

 "Lis" cold emulsion sprayer by Phoenix. Selfpropelled with tank capacity of 95 gallons. For either hand or bar spraying.

6. "Ammann" bituminous spreader finisher by David Roberts & Co. (Engineers) Ltd. Capacity 35 tons per hour.









Medium Dumpers



"Twelve-thirty" diesel dumper by Benford Ltd.



The Mono-Rail Transporter by Road Machines (Drayton) Ltd.

Right: The Motor Rail by Motor Rail Ltd.



Hydraulic Dump Wagon by Whitlock Bros. Ltd.



The Chaseside by Chaseside Engineering Co. Ltd.



DUMPERS

Supplier	Model	Overall Dimensions L x W x H	Engine	Cu Capacity in yds	Maximum Speed in m.p.h.	Approximate Weight	Remarks
AVELING-BARFORD	Heavy duty 7½ cu yd	18' 52" × 8' 72" × 10' 0"	Leyland 150 b.h.p. diesel	6.2 struck 7.5 heaped	22.72	10 Tons	Tips by hydraulic rams to 70 deg Pay load: 20,000 lbs
	4 cu yd	13' 8" x 7' 5½" x 8' 9" with cab	Dorman 54 b.h.p. diesel	3.4 struck 4.5 heaped	20.2	Standard body: 4T 13cwt approx.	Tips by gravity and power-assisted Special body for rock carrying, Pay loads 13,500 and 13,000 lbs
	3½ cu yd	11' 8" x 7' 51" x 8' 91" with cab	Fordson Major diesel or petrol 40 b.h.p.	2.4 struck 3.0 heaped	0,11	Standard body: 3T 14cwt approx.	Tips by gravity and power assistance. Special body for rock carrying. Payloads 8,520 and 8,270 lbs
	1 cu yd	9' 1" x 5' 8" x 4' 6"	24.6 b.h.p. petrol	10 cu ft	12.68	IT 5cwt	Load is gravity tipped. Payload 2,800 lbs
	½ cu yd	7' 5½" x 4' 11" x 4' 1"	4.5 b.h.p. J.A.P. petrol	7 cu ft	3.5	10cwt approx.	Tips with slight manual assistance, Pay load 1,350 lbs
BENFORD LTD.	15cwt	7' 8" × 4' 5½" × 4' 1½"	Petter diesel 5 b.h.p 6 b.h.p.	IA: 12 cu ft struck 14 cu ft heaped 1B IE cu ft: struck 21 cu ft heaped 3: 12 cu ft struck 18 cu ft heaped	IA: II.48 IB: II.48 3: I3.78	IA and IB: 14½ cwt 3: 15cwt	Tips by gravity. All models fitted with special patent endless belt clutch. Recommended use: Mark IA normal building site work. Mark IB with 'one bag' mixers. Mark 3, the heavy duty Public Works model, for mixers up to and including 14/10 size.
	Twelve- Thirty	9' 10" x 5' 7" x 4' 9"	Petter diesel 12 h.p.	3.0 struck 4.0 heaped	12.0	IT Scwt	Designed to carry one complete batch from 21/14 size. Self tipping
J. BLACKWOOD HODGE & CO. LTD. (Distributors for Euclid Road Machinery Co., Cleveland 17, Ohio, U.S.A.)	34 Ton model FFD rear dump Euclid	31' 62" × 11' 5" × 11' 7"	Two General Motors 190 b.h.p. diesel or two Cummins 200 b.h.p. diesel	20.0 struck 23.3 heaped 3 to 1 32.0 heaped 1 to 1	28.8	30T 7cwt	Hydraulic hoists are used to raise and lower the body. Each of the engines drives one of the rear axles. Payload 68,000 lbs
E. BOYDELL & CO.	Muir-Hill 10B	12' 0" x 7' 1" x 8' 3½"	42 b.h.p. diesel	2.5 struck 3.0 heaped	-	3T 3]cwt	Tipping and reset by gravity. Special bodies for free flowing materials. Payload 8,400 lbs
	Muir-Hill 14B	14' 1" x 7' 5\\\ x 9' 9"	60 b.h.p. diesel	4.0 struck 5.0 heaped	17.15	Standard: 4T 18cwt Quarry body: 5T 14cwt	Tipping and reset by gravity. Quarry body available. Payloads standard 13,440 lbs, quarry body 12,544 lbs
CHASESIDE ENGINEERING CO. LTD.	Chaseside	13' 1" x 7' 6" x 7' 3"	Fordson Major 44 b.h.p. diesel or 43 b.h.p. petrol or Per- kins 60 b.h.p. diesel	2.9 struck 3.7 heaped	21.2	4T 2cwt	Tips by hand lever control in the cab and return is automatic. Payload: 10,180 lbs
EUCLID (GREAT BRITAIN) LTD.	FD Rear dump	Standard: 22' 82" × 8' 92" × 10" 32" Quarry: 22' 102 × 10' 4" × 10' 0"	Leyland diesel, 154 b.h.p. engine or Rolls Royce diesel 180 b.h.p.	Standard: 9.7 struck 11.4 heaped Quarry: 10.55 struck 13.2 heaped	24.0	Standard: 13T 8lcwt Quarry: 14T 1lcwt	A telescopic ram is used for raising and lowering the body. Payload: Standard, 30,000 lbs, quarry body, 28,500 lbs
	TD Rear dump	26' 2½" x 10' 8 ½" x 9' 0½"	Rolls Royce diesel 250 h.p.	14.8 struck 16.2 heaped	32.4	Standard: 18T 131cwt Quarry: 19T 51cwt	Hydraulic equipment. Payload: 44,000 lbs. Quarry body available
GEORGE FOWELL (SALES) LTD.	GF Light dumper	7' 61" x 4' 31" x 4' 3"	Petters diesel or Petters, Villiers or B.S.A. 5 h.p. petrol	11.25 cu ft struck	5.0 or 12.0	10 cwt	The hopper can be turned to an angle of 35 deg. on either side to discharge load

Continued on p. 414

Light Dumpers



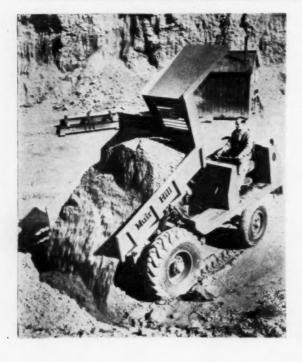


Johnson Twin/55 Diesel by C. H. Johnson (Machinery) Ltd. I or $l\frac{1}{2}$ cu yd capacity.

Left: The Drayton Dumper by Road Machines (Drayton) Ltd.

Dumpers, Continued

Supplier	Model	Overall Dimensions L x W x H	Engine	Cu Capacity in yds	Maximum Speed in m.p.h.	Approximate Weight	Remarks
GEORGE FOWELL (SALES) LTD. (Continued)	GF 15 cwt	7'6½" x 4'8½" x 4'3"	Petter 6 h.p. diesel	16.0 struck 18.0 heaped	6.0 or 12.0	15 cwt	Hopper turns 35 deg. to discharge load either side. Turning circle 18 ft
LINER CONCRETE MACHINERY CO.	Roughrider	7' 9½" × 4' 8" × 4' 2"	6 h.p. Petter diesel	15½ cu ft struck 18 cu ft heaped	12.0	14å cwt	Rear wheel steering, floating rear axle. Wet ballast max. load 13 cu ft
MOTOR RAIL LTD.	3 cu yd	(a) 12' 1\frac{1}{2}" \times 7'5\frac{1}{2}" \times 6' 2" (b) 11' 4" \times 7' 5\frac{1}{2}" \times 6' 2"	Dorman 20 b.h.p. diesel	3.0 struck 3.9 heaped	19.6	(a) 3T 4cwt (b) 3 Tons	Front (a) and rear (b) control models available. Gravity tip Payload 4 Tons. Turning radius 16' 6"
Dr. I	Drayton 15 cwt	7' 10" x 4' 6" x 4' 6"	6 b.h.p. Petter	17 cu ft struck 21 cu ft heaped 10 cu ft concrete	10.0	181 cwc	Brakes are foot and hand operated. Girling expanding type. Turning radius 12'. Gravity tip
	Drayton I Ton	8 2" x 4' 10" x 4' 6"	Stihl 8 b.h.p. diesel	21.5 cu ft struck 27.0 cu ft heaped 14.0 cu ft concrete	10.0	16] cwt	As above
	Mono-Rail Transporter	8' 0" x 4' 0" x 4' 3"	3 h.p. petrol or or electric	13 cu ft water 10 cu ft concrete	3.4	Power wagon: 8 cwt Trailer wagon: 7 cwt	No driver required. Wagons double-sided tipping. Rails in 12 lengths. Points left or right hand are foot operated. Automatic stops can be placed at three positions in any rail
THWAITES AGRICULTURAL ENGINEERING	(3 wheel)	9'3"×5'2"×4'3"	Petter 6 h.p. diesel	14 cu ft water 27 cu ft heaped	10.0	IS cwt	Loading height 2' 11". Turning radius 7' 6". Payload 15 cwt. Gravity tip
CO. LTD.	(3 wheel)	9'3" x 5'2" x 4'3"	As above	12 cu ft water 18 cu ft heaped	10.0	15½ cwt	Loading height 2' 4". Turning radius 7'. Payload 15 cwt. Hy- draulic tip
	15 cwt (4 wheel)	8'5" × 5' 2" × 4' 2"	As above	14 cu ft water 27 cu ft heaped	10.0	15½ cwt	Loading height 2 11". Turning radius 7' 6". Payload 15 cwt. Gravity tip
	(4 wheel)	9' 3½" x 5' 6½" x 4' 10½"	Petter 12 h.p. diesel	31 cu ft struck 44 cu ft heaped	12.0	28 cwt	Loading height 3' 8". Turning radius 11'. Payload 14 tons. Gravity tip.
TRACTORS (LONDON) LTD.	Trusty One yard dumper	8'6" x 5' 1" x 5'6"	Petter diesel or or petrol	I cu yd	10.0	17; cwt	Loading height 3 8". Turning radius 10' 6". Pay load 1½ tons. Manual tip
WHITLOCK BROS.	Hydraulic Dump Wagon- Trailer type	12' 71" x 7' Q1" x 5' 41"	Tractor operated hydraulic equipment	4½ cu yd	-	2 Tons	Steep angle of tip. Pay load 5 Tons. Ram mounted beneath body.



Heavy Dumpers



Model F.D. Rear Dump by Euclid (Gt. Britain) Ltd.

Muir-Hill 14B by E. Boydell & Co. Ltd.

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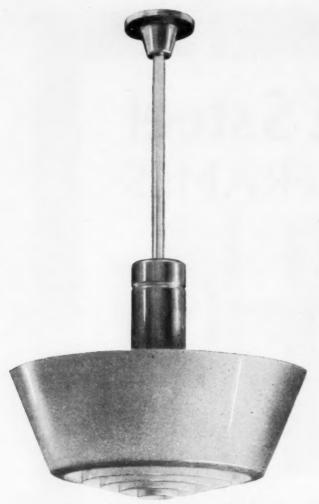
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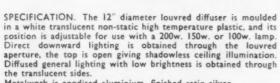
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V.	V.86. Tubular Suspension Type	30/8



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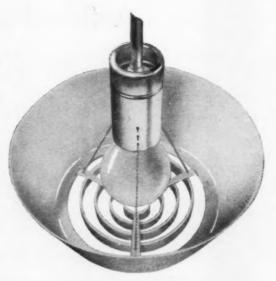
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Aluminium and Lead

THE trade organizations concerned with both of these building materials have each issued new information booklets to take account of revisions of the British Standards which form the basis of the specification of these materials.

The Aluminium Development Association's book is a 200-page publication entitled "The properties of aluminium and its alloys" (price 7s 6d) which is an extremely useful and well prepared publication. It is the same size as a B.S. publication and thus conforms to the recommendation of B.S.1311 for sizes of trade and technical literature.

The book issued by the Lead Sheet & Pipe Council, which is again very pleasantly presented, is entitled "Concise information on lead pipe and sheet" (issued free) requiring only 24 pages as the range of products in this sphere is very much smaller in comparison with the very large range of aluminium and aluminium alloy products. The regrettable feature of the lead booklet is that it is not of a B.S. size consequently it appears likely to be lost among other filed publications or even to be destined for the wastepaper basket if all those who say they will only file for reference literature of uniform size do what they threatened to do.

It seems likely that most of us who specify and buy lead pipes do not fully realise that most of those that we buy are in fact made to comply with one or other of the several B.S. whether or not we order them in compliance. The B.S.I. has published its revisions of B.S.602 "Lead pipes for other than chemical purposes" and B.S.1085 "Lead pipes (silver-copperlead alloy)" in one volume which no doubt will be of convenience to users. It should be noted incidentally that B.S.603 "Lead pipes B.N.F. ternary alloy (No. 2)" has not been included in this revision and it is understood that the manufacture of this type of material has been discontinued with a consequent complete withdrawal of the B.S.

The effects of the revisions of the lead pipe standards are of considerable importance as the revision takes account of the improvements in the uniformity of lead pipes and lays down more closely controlled specifications and testing clauses. On account of the quality changes the revisions include reductions in the permissible weights of pipes for various uses, in particular for underground water services where it is now permitted to use lead alloy pipes to

B.S.1085 in lighter weights, while the medium weights for pipes to either of the B.S. have, in many cases, been reduced when the pipes are used for water services fixed or laid above ground. The standards give separate tables of medium weights for hot and cold water distribution pipes in both standards. The minimum weights of pipes for use for higher water pressures have in most cases been reduced and provision is made for a range of pipes suitable for lower water pressures. The minimum weights for soil and waste pipes have been reduced for all sizes.

It should be noted that building and water supply byelaws usually stipulate that pipe materials shall comply with the requirements of British Standards and the present byelaws may refer to B.S.6025:1939 or 1949 and to B.S.1085:1946. It is understood to be usual for the various authorities to accept the current British Standards pending revision of their byelaws, but, since reductions are involved, it may be as well for users to make enquiries to ascertain that this is the position in any particular area. It is most certainly to be hoped that the authorities will accept willingly and immediately these revised British Standards as they are based on improvements to the quality of the material and it would be most uneconomic if the production of two qualities was forced to continue merely because byelaws cannot be quickly amended to take account of current production and knowledge.

The booklet draws attention also to B.S.334:1934 which is the specification for chemical lead. The primary use of this type of lead is for the fabrication of chemical plant but there are also special applications in building such as for plumbing for laboratories and for the formation of acid-resisting sinks. A mention is also made in the booklet of rectangular pipes, which are available in four sizes and in substance equal to either 7 or 8 lbs/sq ft sheet lead, but this shape does not appear to be covered in either of the B.Ss, presumably as the demand for lead pipe of this shape is no doubt comparatively small.

B.S.1178, which applies to sheet lead and strip for building purposes and to which reference is made in the booklet, remains unaltered.

The A.D.A. document is a revision of a former publication which is very greatly increased in size by the addition of much more and extremely useful information. The need for the revised publication is to take account of the 1955 revisions of the British Standards for aluminium and aluminium alloys for general engineering

purposes, which are now covered in B.S.1470/77 and 1490; it also includes data for alloys as specified for aircraft use in some 34 British aircraft standards and a wide range of Ministry of Supply D.T.D. Specifications. The arrangement of the material is such that all information concerning a particular form of the various materials, such as those for castings, sheet and wire, is in one place and also any material can be found by its allocated number whether it be B.S. or D.T.D.

The book opens with a complete index of British Standards and aircraft specifications, followed by a brief classification of the main groups of aluminium materials. Tabulated data begin with the physical properties together with weight calculations and factors, then follows 118 pages of tables which are notes on mechanical test requirements, the test methods which define tensile properties, such as proof-stress and elongation and include typical hardness values. The characteristics of aluminium applied in particular forms or to certain fields are described under heads such as "super purity"; "foil"; "electrical conductors"; "aluminium powders". Notes on characteristics affecting design include brief data on elasticity, strength in compression, shear stress, bearing and fatigue strengths. Data on the properties of aluminium at elevated temperatures and on "creep" are followed by a note on properties at low temperature. Some general guidance on the selection of materials is given. Appendices list proprietory names under which many compositions are supplied. This publication is certainly an invaluable guide to designers who wish to use aluminium and its alloys.

DUTCH UNCLE



The new Kieft A.55 air thermostat which incorporates a patented double acting micro-switch. Size 41" × 2" sq by Cyril Kieft & Co. Ltd.

Industrial

- The Council of Industrial Design announces that its record of well-designed durable consumer goods "Design Review" which has been closed to visitors since April 9, until The Design Centre opens to the public on April 27, will be moved from its present position on the mezzanine floor to the exhibition floor of The Design Centre. While "Design Review" is closed those who wish to make enquiries about well-designed products are advised to visit the Council's Photo Library, which contains captioned prints of the majority of products in the record. The Photo Library is on the second floor at 28 Haymarket, S.W.I. TRAfalgar 8000.
- The base huts used by most of the expeditions to the South Pole since the time of Shackleton and Scott have all been waterproofed with Ruberoid roofing. For the Royal Society's expedition, and for the current Commonwealth's Trans-Arctic expedition, Ruberoid Co. Ltd. have developed a special cold application cement for use with the roofing, to ensure proper adhesion in conditions where the temperature is seldom above freezing point and where blizzards frequently rage at over 100 m.p.h.
- "Pompeian," a product of the Lewis Berger Paint Group, will now be marketed only by Sir W. A. Rose & Co. Ltd., a member of the Group. Available in a range of 34 colours, and based on a modern improved formulation, "Pompeian" will not be sold retail, but only to the trade, municipalities, etc.
- Dexion Ltd., makers of Dexion Slotted Angle, have made a film called "The Dexion Story." This firm, the first in the field eight years ago, has been flattered by no less than fifteen imitators, improvers, developers, call them what you will. The story of the inventor, Demetrius Comino, and the incredible variety of uses that the material can be put to is told in this very interesting film that is available, free on loan. The film was made by Hartley-Ward Films Ltd. and produced by B. Charles Dean, size either 35 mm. or 16 mm., running time, 24½ minutes. The commentary is in English. French, Spanish or German.
- The new C.M.A. Mineral Insulated

Notes

cables by the Edison Swan Electric Co. Ltd, have solid copper conductors embedded in mineral insulation, the whole enclosed in a solid-drawn copper sheath. One, two, three, four or seven conductors. 250 volt and 660 volt ranges are offered.

- A new company, the A.E.I. Lamp and Lighting Company Limited, has come into operation to market the lamp and Ighting products of the British Thomson-Houston Company Limited, the Edison Swan Electric Company Limited and the Metropolitan-Vickers Electrical Company Limited. The brand names Mazda, Ediswan and Metrovick, associated with the lamp and lighting products of the three companies, are being retained. The Chairman of the new company is Mr. E. H. Ball, M.I.E.E., Managing Director of the British Thomson-Houston Company Limited and a Director of Associated Electrical Industries. The Joint Managing Directors are Mr. V. C. H. Creer and Mr. S. R. Eade, M.I.E.E.
- It was announced at the annual general meeting of the Expanded Metal Co. Ltd., of London and West Hartlepool, that Sir Patrick Hamilton, Bart., has been appointed chairman of the company. He succeeds his cousin, Lieutenant Commander G. C. Hans Hamilton, C.B.E., who has been chairman since 1947. Lieutenant Commander Hamilton remains a member of the board.
- Mr. E. A. Murphy, M.Sc., F.R.I.C., F.I.R.I., chief of the team of research chemists who founded the world industry of latex foam rubber 28 years ago, and Mr. Henry Trevaskis, A.F.R.Ae.S., who has developed the gun-firing controls used in Brit'sh Fighter aircraft since 1937, are the new key-men of Dunlop's expanding research and development organisation at Fort Dunlop, Birmingham. Mr. Murphy, general development manager at the Research Centre, becomes Director of Research in charge of the central research division. Mr. Trevaskis, director of the Dunlop Rim and Wheel Co. Ltd., and chief designer of the aviation division, becomes Director of Development in the new organisation.
- The Baird and Tatlock Group of Com-

- panies announce that S'r Bernard Keen, D.Sc., F.Inst.P., F.R.S., and Mr. A. G. P. Powell, B.A. (Oxon) have been elected to the board of Baird and Tatlock (London) Ltd., and Mr. W. C. Johnson, M.B.E., F.R.I.C., and Mr. H. N. Ricketts, B.Sc., A.C.G.F.C., F.R.I.C., have been elected to the board of Hopkin and Williams Ltd.
- Mr. David Wood has been promoted to a directorship of Concrete Limited. He will be chiefly responsible for Southern Contracts Administration and Training.
- Mr. Donald Goulding has been appointed Head of the Export Sales Department of Winston Electronics, Ltd., Shepperton, Middlesex.
- Mobil Oil Company's General Sales Manager (Industrial), Mr. F. N. Judson, has retired. He is succeeded by Mr. G. M. McGavin. Two years ago Mr. Judson celebrated 40 years of distinguished and varied service in the Company, and, in recognition of his contribution to the affairs of the oil industry throughout these years, he was awarded an M.B.E. in the 1956 New Year's Honours List.
- Certain Local Authorities have decided to retain temporary prefabricated bungalows beyond the original 10 year period; in other boroughs, these are being demolished. Electrolux Limited inform us that they are prepared to inspect and, if necessary, renovate Electrolux M.151 Built-in Refrigerators installed in these dwellings. If any municipality wishes to obtain further details of this scheme, they should write for information to the Service Manager, Electrolux Limited, 153/5, Regent Street, London, W.1.
- The combined Manchester Depot of Aerialite Ltd. and Nettle Accessories Ltd. has been moved to larger premises at 355, Deansgate, Knott Mill. Manchester, 3.
 The new telephone number is Blackfriars 2604
- Mr. J. McBrearty has been appointed General Manager of C.A.S. (Contractors) Ltd., in succession to Mr. C. C. Miller, A.C.A., who has resigned to take up a new consultancy appointment in the Midlands.
- The Birmingham Depot of Ferodo Ltd. has moved to new premises at 111/ 119, New Town Row, Birmingham 6. Telephone: Aston Cross 1762.



The latest range of 3-pin switched socket outlets by J. A. Crabtree & Co. Ltd. are all fitted with their Type A.C. switch which has a moulded nylon dol'y. The complete range contains flush and surface units in both 5 and 15 amps.



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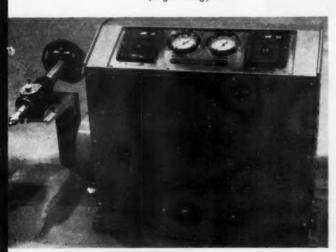
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NEW PRODUCTS

taken this week from the Shell-Mex and B.P. Ltd. stand at the Factory Equipment exhibition at Earls Court.

BECAUSE this country's industrial progress has outstripped its internal fuel resources, fuel must be imported. The Government has been assured by the petroleum industry that a substantial contribution towards solving the problem will be made and that the necessary quantities of oil fuel will be forthcoming. It has been estimated that by 1960 present day consumption of fuel oil must be trebled, an increase of fourteen million tons a year. To bring this about one in four of to-day's industrial and commercial coal users will have to make the change to oil during that period of time. This, in turn, means that the oil burner industry must continue to expand and develop, as it has done so very recently, in order to supply the necessary equipment. At the Factory Equipment Exhibition the stand of Shell-Mex and B.P. Ltd. contained over a 100 exhibits from 76 manufacturers, the largest display of oil-fired and oil-firing equipment ever to be shown in this country. On this page and the next are shown a selection of new and recently developed equipment produced by the oil burner industry.

Janitor Type O4 boiler by Janitor Boilers Ltd.
Burner: ABC Pyrojet by Associated British Combustions Ltd.

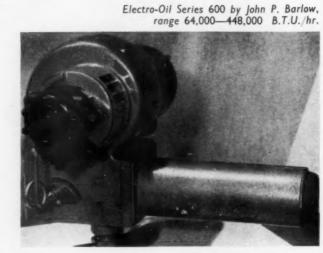


New Products Continued from p. 417

Thermoil Type 150 B-L, by Thermofire Engineering Co. Ltd. range: 260,000—340,000 B.T.U./hr.



Model ZH12, by Nu-Way Heating Plants Ltd., range 560,000—1,260,000 B.T.U./hr.



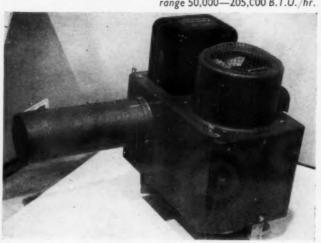
Kingsway Model G200, by R. F. Landon and Partners, range 110,000—720,000 B.T.U./hr.



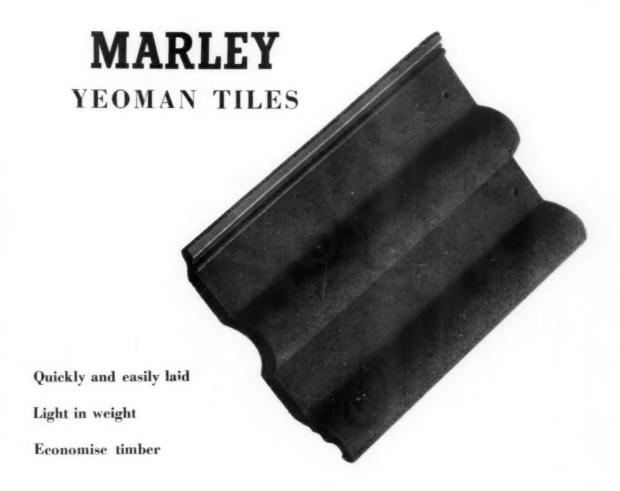
Model C (M)1, by Henry Wilson & Co. Ltd. range 480,000—750,000 BT.U./hr.



Lucas Oil-o-matic, by Joseph Lucas (Gas Turbine Equipment) Ltd., range 50,000—205,C00 B.T.U./hr.







Gauge	Lap	No. of Tiles		Feet Run of Batten		Approx.Weight of Tiling in Ib.	
		per sq.	per sq. yard	per sq.	per sq.	per sq.	per sq. yard
13¼"	3″	92.5	8.3	90	8.1	1,000	90
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1114"	5"	109	9.8	107	9.6	1.200	108

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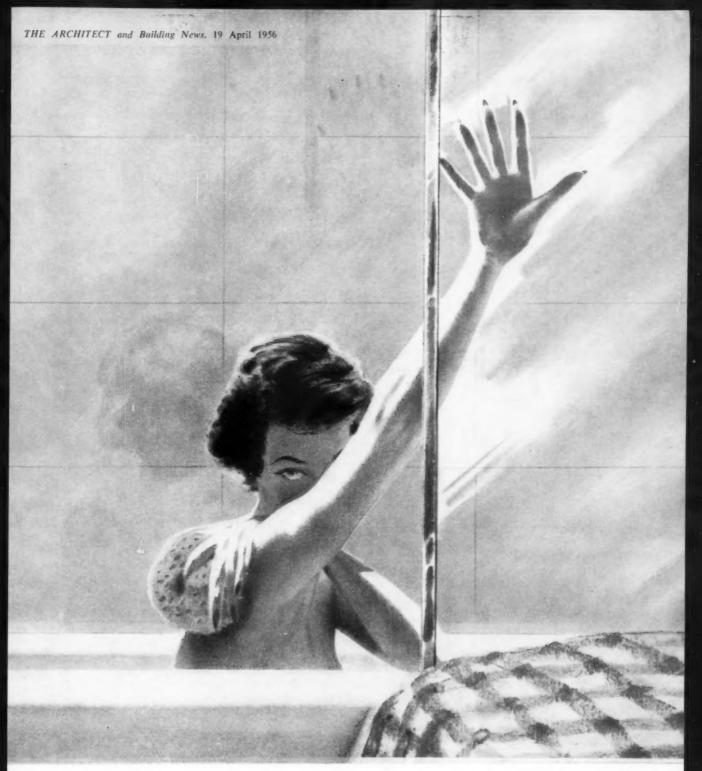
The photograph shows silicon carbide grains being trowelled in, after they had been sprinkled over a freshly laid section of concrete. The CARBORUNDUM Company Limited supplied 7 tons of silicon carbide grains for the preparation of all floor and where this picture was taken.





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"VITROLITE" gleams with matchless beauty—as permanent as it is hygienic. Because they are inherent in the glass, and not just applied to it, the colours never fail or wear off, and the smooth, fire-finished surface never crazes or loses its bright sheen. "Vitrolite" has many uses, and wherever it is used it brings beauty—to stay.

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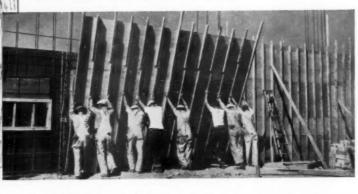


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Standard panels: 8 x 4 feet. (Panels over 8 feet available on order). Thicknesses (depending on grade): 1/4, 5/16, 3/8, 1/2, 5/8 and 3/4 inches.

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Douglas Fir Plywood Concrete Form Work (L-12)

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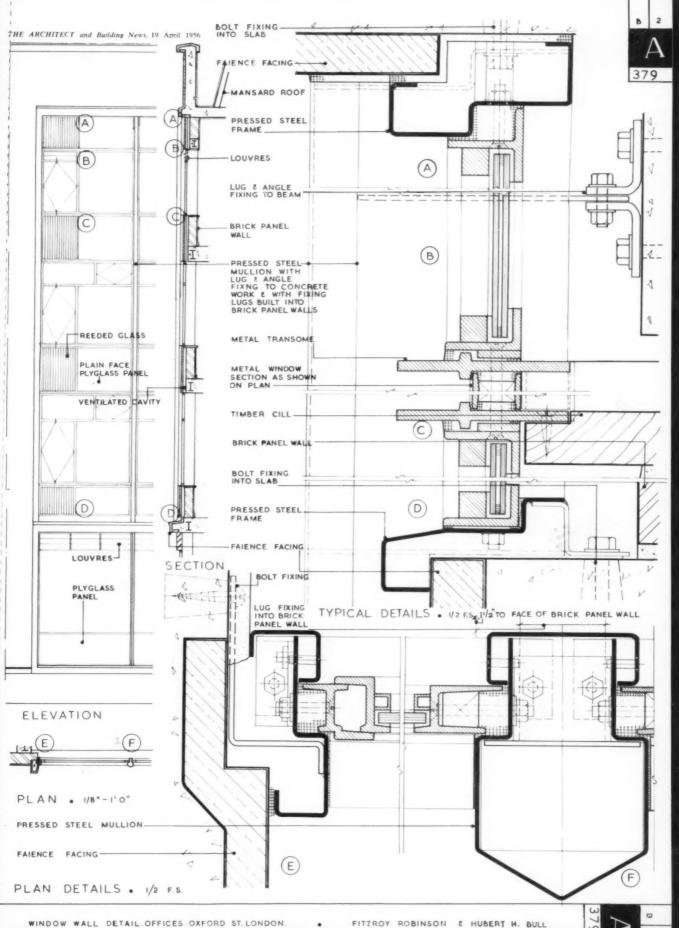


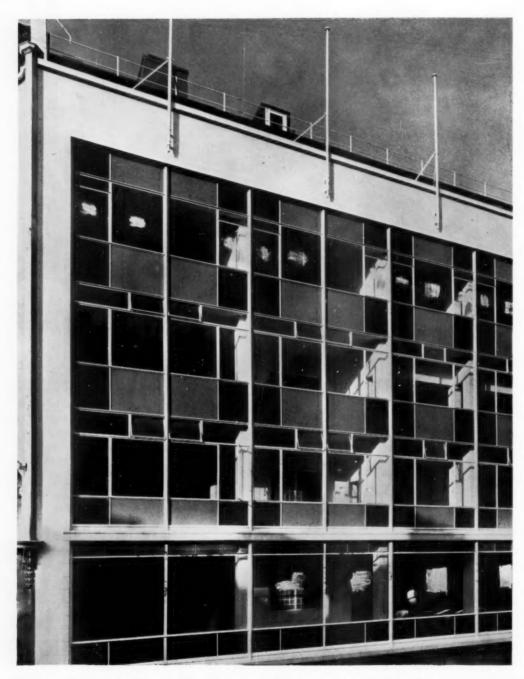
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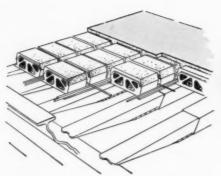


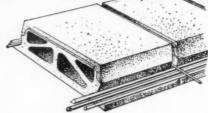


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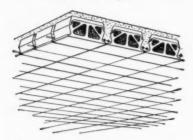


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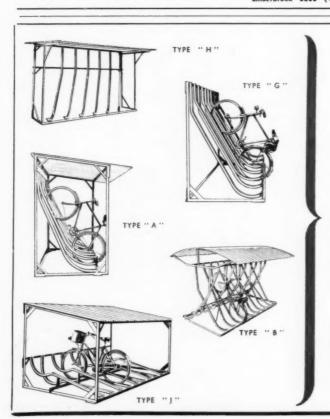
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CONTRACTNEWS

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BUILDING

BARROWFORD U.C. (a) Erection of 24 flats on the Higher Causeway estate. (b) Council's Surveyor, Council Offices. (c) 2gns each trade. (e) May 4.

BILLINGE AND WINSTANLEY U.C. (a) Erection of proposed 20 houses in five blocks at Cob Moor site. (b) Council's Clerk, Council Offices, Billinge, Nr. Wigan. (c) 3gns.

BLETCHLEY U.C. (a) Erection of factory No. 10 on the Council's industrial estate, off Watling Street. (b) Council's Engineer, Council Offices. (c) £5. (e) May 9.

BOOTLE B.C. (a) Erection of secondary school for girls at Brown's Lane, Netherton. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) May 12.

BRECKNOCK R.C. (a) Erection of a new public convenience to be built near Llangorse Lake. (b) Messrs. J. Merton Jones and Sons, St. Mary's Chambers, Abergavenny. (c) 2gns., by cheque, payable to Council. (e) May 14.

CHAPEL-EN-LE-FRITH R.C. (a) Erection of public conveniences at Chinley. (b) Council's Engineer, Council Offices, Hayfield Road, Chapel-en-le-Frith, via Stockport. (e) 2gns. (e) May 19.

CLACTON U.C. (a) Erection of (1) waterworks depot and (2) pair of houses at Bocking's Elm, Clacton-on-Sea. (b) Water Engineer and Manager, Town Hall. (c) Ign each contract. (e) May 1.

DEVON C.C. (a) Erection of kitchen and dining-room at Ellacombe C.P. School, Torquay. (b) County Architect, 97, Heavitree Road, Exeter. (c) 2gns, by cheque, payable to Council. (d) April 23.

EAST BARNET U.C. (a) Contracts 812 and 813 — Erection of three- and four-bedroom houses in two groups of 18 and 20 houses, respectively. (b) Council's Engineer, Town Hall, Station Road, New Barnet. (c) 2gns each group. (e) May 7.

EAST SUSSEX C.C. (a) Erection of an additional classroom and cloakroom accommodation at Northian C.E. School. (b) County Architect, County Hall, Lewes. (d) April 24.

ENFIELD B.C. (a) Erection of one block of four houses at the junction of Bilton Way and Bideford Road. (b) Mr. Frank Lee, 7 Little Park Gardens. (c) 2gns. (d) April 25. (e) May 23.

ESSEX C.C. (a) Erection of additional classroom and practical room at Aveley Secondary School. Approx. cost £6,000. (b) County Architect, County Hall, Chelmsford. (d) April 30.

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked # are given in the advertisement section.

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William Thornton & Sons, Ltd., 38 Wellington Road, Liverpool, 8 Tel.: Lark1921/4. 'Grams: Thornpool, Liverpool. ESSEX C.C. (a) Erection of (1) additional classroom and (2) hutted practical rooms, at Romford High School. Approx. cost (1) £4,500 and (2) £7,250. (b) County Architect, County Hall, Chelmsford. (d) April 28.

HINCHLEY U.C. (a) Erection of 26 houses in pairs on the Waterfall estate, Barwell, and 16 flats in blocks of four on King George's Way. (b) Council's Surveyor, 9 Station Road. (c) £2. (e) April 30.

IRAQ—GOVERNMENT OF IRAQ. (a) Erection of a theatre and assembly hall at Karradat. (b) From technical office in the Mutasarrifiyah, in Bagdad, or from the Iraqi Embassy in London. (c) 20 dinars. (e) May 30.

ISLE OF WIGHT R.C. (a) Erection of 5 dwellings at Arreton. (b) 30 Pyle Street, Newport. (c) 2gns. (e) April 30.

KINGSTON UPON THAMES ROYAL B.C. (a) Erection of 8 two-bedroom and 8 one-bedroom flats at the junction of Burritt Road and Cambridge Grove Road. (b) Town Clerk, Guildhall. (c) 2gns. (d) April 30.

LINCOLN C.C. (a) Demolition of semi-detached house and farm buildings, erection of part sets of farm buildings, re-building of gable end wall to remaining house and making up of approx. 700 yards of farm road, together with repairs and painting of all properties at Glebe Farm, Blankney Fen. (b) County Land Agent, County Offices, Sleaford, Lincs. (c) May 7.

MANCHESTER C.C. (a) Erection of additional sanitary accommodation at St, John's College for Further Education, Atherton Street. (b) City Architect, P.O. Box No 488, Town Hall. (e) April 28.

NANTWICH R.C. (a) Erection of 8 bungalows, together with construction of sewers, road layby, footpaths and ancillary works at Wybunbury site. (b) G. T. Jury, Stapeley House, Stapeley, near Nantwich. (c) 3gns. (e) May 2.

NANTWICH R.C. (a) Erection of 26 houses on the Wardle site. (b) G. T. Jury Stapeley House, Stapeley, near Nantwich. (c) 3gns. (e) May 2.

NEWARK - ON - TRENT CORPORA-TION. (a) Erection of 16 garages at Winthorpe estate. (b) Borough Surveyor, Municipal Buildings. (e) May 4.

NEWTOWN & LLANLLWCHAIARN U.C. (a) (1) Completion of 16 houses and (2) erection of one block of four additional houses on site adjoining, at Canal Road site. (b) A. Stanley Hill, Community House. (c) 2gns. (e) May 5.

N. IRELAND — BELFAST. (a) Erection of new classrooms, two changing pavilions, alterations and additions to existing buildings, drainage, paths and general site works at Methodist College, Pirrie Park, for Board of Governors. (b) F. H. Wright and Partners, 79 Botanic Avenue. (c) 5gns. (e) May 7.

N. IRELAND — BELFAST. (a) Erection of Our Lady of Mercy Intermediate School, Ballysillan Road, together with pump house, site works, etc., for the

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N. IRELAND — COUNTY FER-MANAGH JOINT ABATTOIR COM-MITTEE, (a) Erection of a new abattoir at Enniskillen. (b) W. H. Stephens and Sons, 13 Donegall Square North, Belfast. (c) 5gns. (e) May 15.

NOTTINGHAM C.C. (a) Erection of additional classrooms and toilet block to the special school, The Arboretum. (b) City Engineer, The Guildhall. (c) £2. (e) May 7.

OLDHAM B.C. (a) Erection of 91 dwellings on the Alt Estate. (b) Cameron and Middleton, 21 Queen Street. (c) 2gns. (e) April 28.

PETERBOROUGH C.C. (a) Erection and completion of 34 semi-detached houses and 8 houses in two blocks of four. (b) City Engineer, Town Hall. (c) 2gns. (e) April 30.

PORTSMOUTH C.C. (a) (1) Alterations, etc., to Southsea Modern Girls' School, Francis Avenue, (2) erection of a depot at Leigh Park. (b) City Architect, 1 Western Parade. (c) £1 each contract. (d) May 3.

ROWLEY REGIS B.C. (a) Erection of 70 houses on the Corngreaves estate. (b) Council's Architect, Municipal Buildings, Old Hill, Staffs. (c) 3gns. (e) May 24

STRATFORD-ON-AVON R.C. (a) Erection of 8 houses and 8 flats at Park Piece, Kineton. (b) Messrs. Earp, Badger and Harrison, Guild Chambers, Scholars Lane. (c) 2gns, by cheque. (e) May 3.

WAKEFIELD C.C. (a) Bricklaying, concreting, joinery and carpentry, central heating, in connection with a steel frame workshop building at Denby Dale Road Depot. (b) Waterworks Engineer, 21 King Street. (e) April 28.

WELWYN R.C. (a) Erection of 20 bungalows on the Queensway site. (b) Council's Surveyor, Council Offices. (c) 2gns. (e) April 27.

WEMBLEY B.C. (a) Applications are invited from contractors for inclusion in selected lists of contractors from whom tenders will be invited during the year ending March 31, 1957, for erection of public buildings, houses, flats and ancillary works. List A—over £100,000, List B—between £30,000 and £100,000, List D—between £2,500 and £20,000, and List D—between £500 and £2,500. (b) Borough Engineer, Town Hall, accompanied by particulars of works recently carried out, preferably for local authorities, together with the name and address of the architect, engineer or authority. Details of labour resources and banker's reference must also be given. (d) April 25.

WORCESTERSHIRE C.C. (a) Erection of a college of further education on a site off Well Lane, Bromsgrove. (b) Messrs. F. R. S. Yorke, E. Rosenberg and C. S. Mardall, 2 Hyde Park Place, W.2. (c) 2gns. (d) April 23.

WORSLEY U.C. (a) Erection of 22 houses and one shop at Neighbourhood Unit No 1, Little Hulton. (b) Quantity Surveyor, Town Hall, Walkden. (c) Surveyor, Town 2gns. (e) May 2.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

LAMBETH B.C. (1) 61 houses, 6 bungalows. (2) Gipsy Hill. (3) Halse and Sons Ltd., Chapel Hill, Woolwich, S.E.18. (4) £136,694.

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CHESTER CITY COUNCIL. (1) 64 houses, 12 bungalows, 16 flats. (2) Hare Lane. (3) Lloyd and Cross Ltd., Argyle Street, Birkenhead. (4) £116,795.

TOTTENHAM B.C. (1) Development for housing. (2) The Hale. (3) C. J. Manning (Builders) Ltd., Buxton House, Snaresbrook, London E. 11. (4) £127,287.

CHATHAM B.C. (1) 80 houses and 22 houses. (2) Weeds Wood and Way-field estates. (3) K. A. Hawkes Ltd... Minnis Road, Birchington, Margate. (4) £140,309

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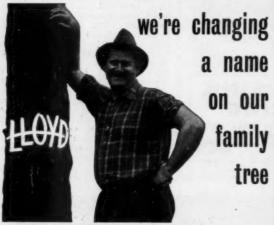


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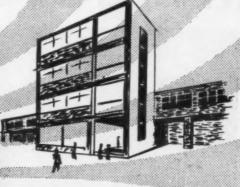
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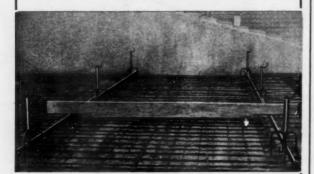
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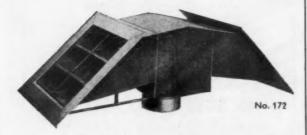
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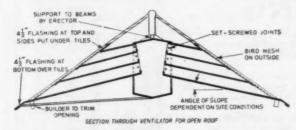
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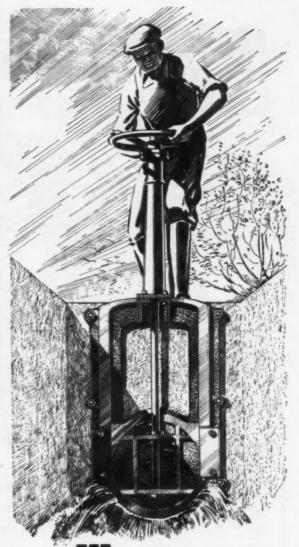
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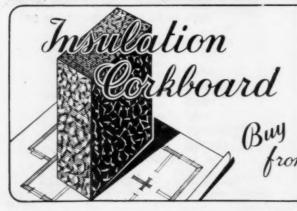
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FROM THE EARLIEST CIVILIZATIONS
TO THE PRESENT DAY

By Bruce Allsopp, B.Arch. (Liverpool),
A.R.I.B.A., A.M.T.P.I. With the growth of the
modern movement in architecture it has become clear
that the old approach to architectural history is
misleading—that a reconsideration of the subject as a
whole has long been needed. This book satisfies that
need. It should be read by all architects who want
to remain really up to date with recent trends and
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APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or the or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

BOROUGH OF SWINDON

BOROUGH ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the following appointments on the staff of the Borough Architect's Department, required for a large and varied development programme including bousing schemes and industrial buildings in connection with the expansion of the town.

(a) Assistant Architect, Grades A.P.T. IV/V

Assistant Architect, Grades A.P.T. IV/V

Assistant Architect, Grade A.P.T. IV

(£710 to £970)

Applicants must have passed the Final R.I.B.A., or nuivalent examination and have appropriate

(b) Quantity Surveyor, Grades A.P.T. IV/V (£710 to £970)

Quantity Surveyor, Grade A.P.T. IV

Quantity Surveyor, Grade A.P.1. IV

(£710 to £885)

Applicants must have passed the Final R.1.C.S. or

uivalent examination and have appropriate

experience.

Housing accommodation is available.

Application, on forms to be obtained from the
Town Clerk, Civic Offices, Swindon, must be returned
not later than 1st May, 1956.

[2240]

LEYTON COMMITTEE FOR EDUCATION

APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the permanent appointment of a JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. GRADE I, £506-£640 per annum including London Weighting £30) which is reduced according to scale where age is less than 26.

The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, London, E.10.

Alternate Saturday mornings free of duty and

E.10. Alternate Saturday mornings free of duty and canteen facilities available. Details and form of application from the Borough Education Officer, Kirkdale Road, Leytonstone, E.10, to whom they should be returned by WEDNESDAY, 9th MAY, 1956.

D. J. OSBORNE.

Town Hall, LEYTON, E. 10. 7th April, 1956.

BOROUGH OF WORKINGTON

APPOINTMENT OF ARCHITECTURAL ASSISTANT

A PPLICATIONS are invited for the appointment of an Architectural Assistant in the Borough Surveyor's Department at a salary in accordance with A.P.T. Grades II (£595-£675) or III (£640-£765) according to qualifications.

according to qualifications.

Applications should be made on forms which can
be obtained from the undersigned, and are to be sent
in not later than 24th April, 1956.

Housing accommodation will be provided for the

not later uses the housing accommodation will be housing to be housing the housing accommodation will be housing to be housing to be housing the housing accommodation will be housing to be h Town Clerk.

Town Hall, Workington. 9th April, 1956.

[2234

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

VACANCIES for Architects, Grade III (up to £987), VACANCIES for Architects, Grade III (up to 1987),
and Architectural Assistants (up to £818), for
widespread construction programme which includes
houses, blocks of flats, schools of all types, and
various public and industrial buildings.—Application
forms and particulars from Architect (AR/EK/A/3),
The County Hall, S.E.1. (1189). |0006

APPOINTMENTS—cont.

RESEARCH FELLOWSHIPS TENABLE AT THE BUILDING RESEARCH STATION

A PPLICATIONS are invited from Architects for a Senior and a Junior Research Fellow to work as members of a team studying the design and construction of factory buildings. The Fellowships will be for a period of two years, with a possibility of extension to a third year. Candidates for the Senior Fellowship should be Associates of the R.I.B.A. and have additional experience, preferably in a fiche related to the investigation. Total emohuments up to £1,000 per annum depending on qualifications. Candidates for the Junior Fellowship should have qualifications in architecture and should show evidence of ability and architecture and should show evidence of ability and architecture and should show evidence of ability and raughtsmanship and design. Salary up to £750 per annum.

annum.
Applications, which should give the names of two referees, should be addressed to Building Research Station, Garston, Watford, Herts, marked "For the attention of the Secretary, Factories Building Research Committee," to be received not later than 30th April, 1956.

BOROUGH OF WATFORD

APPOINTMENT OF CHIEF ASSISTANT QUANTITY SURVEYOR

APPLICATIONS are invited for the above post on Grade A.P.T. V (£795 - £970).

Applicants should be accustomed to the preparation of Bills of Quantities, Specifications, Estimates and settlement of accounts in connection with building work. The holding of a professional qualification will be an advantage.

Consideration will be given to the provision of housing accommodation for the successful applicant. Forms on application, returnable on 27th April, 1956.

F. C. SAGE, Borough Engineer, Surveyor and Architect.

Town Hall, Watford. 6th April, 1956.

URBAN DISTRICT COUNCIL OF EAST BARNET

A PPLICATIONS are invited for the following

A PPLICATIONS are invited for the following permanent appointments:—

(a) Senior Assistant Architect—

Grade A.P.T. IV (£710 to £885 per annum)

(b) Assistant Architect—

Grade A.P.T. III (£640 to £765 per annum)

(c) Architectural Assistant—

Grade A.P.T. III (£950 to £675 per annum)

(d) Draughtsman (Architectural) —

Grade A.P.T. I (£530 to £675 per annum)

All salaries will be increased by London Weighting of £20 to £30 per annum according to age.

Housing accommodation will be provided for appointments (a) and (b) if necessary.

Conditions of appointment and Forms of Application, returnable by May 7th, 1956, may be obtained from the Engineer and Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire.

(2195)

THE UNIVERSITY OF MANCHESTER

A PPLICATIONS are invited for the post of LECTURER IN ARCHITECTURE. Applicants must have had not less than three years practical office experience. Salary on a scale rising to £1,350 per annum with membership of F.S.S.U. and Children's Allowance Scheme: initial salary according to qualifications and practical experience. Applications should be sent not later than 9th May, 1956, to the Registrar, the University, Manchester 13, from whom further particulars and forms of application may be obtained. [2225]

THE METROPOLITAN BOROUGH OF HAMPSTEAD

REQUIRE in the Housing Architect's Section of the Borough Engineer's Department a Chief Architectural Assistant, Grade A.P.T. V/VI (£795/£1.080. plus London Weighting). He should be an Associate Member of the R.I.B.A. Medical examination required. No housing provided. Applications, suitably endorsed, giving names of three referees, to the Town Clerk, Town Hall, Haverstock Hill, N.W.3.. by Thursday, 26th April, 12202

APPOINTMENTS-cont.

CITY OF MANCHESTER

HOUSING DEPARTMENT

A PPLICATIONS are invited from suitably qualified persons for the following appointments: ASSISTANT ARCHITECTS — A.P.T. IV £710-£885 p.a. (Applicants must be registered Architects and Associates of the R.I.B.A.).
ARCHITECTURAL ASSISTANTS—" Basic Grade," £690 - £840 p.a. (Applicants should have passed Parts 1 and 2 of the R.I.B.A. Final or Special Examination or their equivalent).
ARCHITECTURAL ASSISTANTS—A.P.T. I, £530-£610 p.a. (Applicants should have passed the R.I.B.A. Intermediate Examination or its equivalent).

The appointments offer scope for experience in large scale central area development, and preference will be given to those with a keen interest in contemporary design.

Applications, giving particulars of age, qualifications and experience, together with the names of two referees, should be addressed to the Director of Housing, Town Hall, Manchester 2, to be received not later than May 15th, 1956. [2247]

COUNTY BOROUGH OF DERBY

BOROUGH ARCHITECT'S DEPARTMENT

- Senior Assistant Architect, A.P.T. Grade IV (£710 £885 per annum).
- Senior Assistant Quantity Surveyor, A.P.T. Grade V (£795 £970 per annum).

COMMENCING salary will be according to qualifications and experience.

Permanent superannuable appointments, subject to one month's notice and to medical examination. National Conditions of Service.

Applicants must state for which post they are

Applicants mass same too application forms obtainable applying.

Further particulars and application forms obtainable from and to be returned to The Borough Architect, The Council House, Corporation Street, Derby, not later than Monday, May 7th, 1986.

G. H. EMLYN JONES, Town Clerk.

April 11th, 1956.

COUNTY LONDONDERRY EDUCATION COMMITTEE

ARCHITECT'S DEPARTMENT

A PPLICATIONS are invited for the following

A PPLICATIONS are invited for the positions:

(a) ARCHITECTURAL ASSISTANT. Applicants must have passed the Intermediate R.I.B.A. Examination. Salary within the range £43-8725, according to qualifications and experience.

(b) DRAOOHTSMAN. Applicants should have at least two years experience in an Architect's Office. Salary within the range £250 x 25 - £425, according to qualifications and experience. Application forms, obtainable from the Director of Education, Education Office, New Row, Coleraine, should be returned not later than May 8th, 1956.

[2246]

PADDINGTON BOROUGH COUNCIL

Require QUANTITY SURVEYOR'S ASSISTANT (A.P.T. II — £625 to £705 p.a.).

Require Quarter CA.P.T. II — 6625 to £705 p.m./.

CAP.T. III — 6625 to £705 p.m./.

CANDIDATES should have experience in preparation of estimates, working up, abstracting, billing, site measurement and work up to final account stage. Preference to candidates being holders of, or at standard of, Inter R.I.C.S. (Quantities sub-Division). Applications, stating age, qualifications, experience, present and past appointments, names and addresses of three referees should be sent to the under-signed (quoting A.283) by May 1st, 1956, the under-signed (quoting A.283) by May 1st, 1956.

W. H. BENTLEY,

Town Cierk.

Town Hall, Paddington Green, W.2.

COUNTY BOROUGH OF NEWPORT

A PPLICATIONS are invited for the appointments of Assistant Architects in Grade 4 (£710-£885). Further information and forms of application obtainable from the Borough Architect, Civic Centre, Newport, Mon. to whom they should be returned not later than Monday, 30th April, 1956.

APPOINTMENTS—cont. CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

CITY ARCHITECT'S DEPARTMENT.

THE City Architect will be pleased to receive applications from suitably qualified persons for the following vacancies in the Architectural Sections of his Department:—

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. Division Grade VI (£880 - £1,080)—Education

(b) SENIOR ASSISTANT ARCHITECT, A.P.T. Division Grade V (£795 - £970) — General,

Division Grade V (£795 - £970) — General, Housing or Education Sections.

(c) SENIOR ASSISTANT ARCHITECT, A.P.T. Division Grade IV (£710-£885) — General Housing or Re-Housing Sections.

(d) ASSISTANT ARCHITECT, A.P.T. Division Grade III (£640-£765)—Housing or Re-Housing Centrols.

(e) ASSISTANT ARCHITECT, A.P.T. Division Grade II (£595 - £675—Housing Section.

Grade II (£595 - £675—Housing Section.

ARCHITECTURAL ASSISTANT, A.P.T.

Division Grade I (£530 - £610) — Housing

Division (rade 1 (2304 - 26109 - notating Section. The above are all established posts, and will be subject to the provisions of the Local Government Superannuation Acts, 1937 - 1953, and to one month's notice on either side. Successful candidates will be required to pass a medical examination. Applications, stating position applied for, age, particulars of training, qualifications, experience, present and past appointments, together with copies of two recent testimonials or the names and addresses of two persons to whom reference may be made, should be addressed to George Kenyon, Esq., A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle-upon-Tyne, 1.

JOHN ATKINSON, Town Clerk.

Town Hall, Newcastle-upon-Tyne, 1. 13th April, 1956.

BRACKNELL DEVELOPMENT CORPORATION

APPLICATIONS are invited from Corporate members of the R.I.B.A. for the post of ASSISTANT ARCHITECT GRADE IV. — Salary £710 x £4066 x £1001) - £986.

Superannuation schemes, medical examination. Housing available in due course. Apply by 30th April, 1986, giving age, education and qualifications; experience and appointments held (with dates and salaries) and names of two referees to the General Manager (A.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. [2233]

AIR MINISTRY Works Designs Branch requires in London and Provinces ARCHITECTURAL ASSISTANTS experienced in planning //preparation of working drawings and details for permanent and semi-permanent buildings.

Salaries up to £850 p.a. (men) and £752 (women). Starting pay dependent on age, qualifications and experience.

experience.

Paid overtime. Long term possibilities with promotion and pensionable prospects, four weeks leave a year. Liability for overseas service. Normally natural born British subjects. Write stating age, qualifications, employment details including type of work done, to any Employment Exchange, quoting Order No. Borough 1000.

[2221]

RESIDENT ARCHITECT required to supervise contract work in London and the Home Counties in connection with the Modernisation Plan. Successful applicant will be attached to the office of the Architect, Eastern Region, King's Cross Station, Applicants should have had experience of site supervision and should preferably be qualified. Salary range £770 to £835. Five-day week, concessionary rail travel, permanency with memberabip of superanguality and several republications of the proposition of the contract of

PADDINGTON BOROUGH COUNCIL

Require BUILDING SURVEYING ASSISTANT (A.P.T. II — £625 to £705 per annum).

CANDIDATES should have practical knowledge CANDIDATES should have practical knowledge of building construction, experience in surveying and kevelling, the repair adaptation and conversion of civil and residential properties, and be capable of preparing plans, specifications and estimates of costs in respect of those works and their supervision. Candidates preferred at advanced stage of preparation for R.I.C.S. Intermediate or equivalent examination. Written applications, stating age, qualifications, experience and names and adresses of three referees should reach the under-signed (quoting A.282) by May 1st, 1956.

W. H. BENTLEY, Town Clerk.

Town Hall, Paddington Green, W.2.

APPOINTMENTS—cont.

COUNTY BOROUGH OF EAST HAM

BOROUGH ENGINEER'S DEPARTMENT

SENIOR ASSISTANT ARCHITECT Grade IV £710 - £885 ARCHITECTURAL ASSISTANTS

ARCHITECTURAL ASSISTANTS

Grade II £595 - £675

JUNIOR ARCHITECTURAL ASSISTANTS

Grade I £530 - £610 QUANTITY SURVEYOR

Grade II £595 - £675

London Weighting is paid in addition. Salary in questions and experience. Subsistence allowances

qualifications and experience.
Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.
Further details and application forms returnable by 4th May, 1956 from the Town Clerk, Town Hall, East Ham, E.6. [2254]

PUBLIC SERVICE OF TASMANIA

APPLICATIONS are invited from fully qualified Architects for appointment to the staff of the Public Works Department at Hobart, Tasmania. Salary range £Al.164 - £1.589 per annum. Appointees and their families will be nominated for assisted passages under the Commonwealth Government Migration Scheme. They will be appointed to the headquarters staff of the Department and will be required to prepare sketch designs, working drawings, details and specifications of public buildings of all types. Applications in duplicate, giving full particulars of professional qualifications and experience, and personal details, should be lodged with the Agent-General for Tasmania. 457 Strand, London, W.C.2.

BEESTON AND STAPLEFORD URBAN DISTRICT COUNCIL.

VACANCIES for Architectural Assistants within Grade A.P.T. III (2640 to £765) according to qualifications and experience.

Housing accommodation will be made available if

Housing accommodation will be made available it required.

Applications, naming two referees, to the Surveyor, Town Hall, Beeston, Notingham, by 28th April, 1956.

H. D. JEFFRIES H. D. Jers Council. Clerk of the Council. [2251

COUNTY BOROUGH OF EAST HAM

JUN. ASST. PLANNING OFFICER

Grade I £530-£610. Borough Engineer's Department. Plus London Weighting. Salary above minimum and subsistence may be paid subject to conditions. Details and form from Town Clerk, E.6. Closing date 30th April, 1956.

PUBLIC NOTICE

IN THE HIGH COURT OF JUSTICE IN BANKRUPTCY No. 396 of 1956

In the Matter of a Bankruptcy Notice issued on the 12th day of March 1956.

To GEORGE EDWARD BRIGHT of 11 Lower John Street, Regent Street, W.l., in the County of London, Architect.

TAKE NOTICE that a Bankruptcy Notice bas been issued against you in this Court by National Provincial Bank Limited of 15 Bishopsgate in the City of London, and the Court has ordered that the publication of this notice in the London Gazette and in "The Architect and Building News" newspapers shall be deemed to be service of the Bankruptcy Notice upon you.

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Registra. [2223

MISCELLANEOUS SECTION

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MENTS VACANT The engagement of persons answering these

ARCHITECTURAL APPOINT-

vertisements of persons unswering trees unvertisements must be made through the local office
of the Ministry of Labour and National Service, etc.,
if the applicant is a man aged 18-64 or a woman
aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The
Notification of Vacanaces Order, 1952.

ARCHITECTURAL assistant required by London architects, W.C.1. Progressive post with opportunities for individual re-ponsibilities and experience. — Apply in writing, stating age, experience and saiary required, to Box 1154, c/o A & B. N.

ENIOR experienced assistant required by London firm of architects, medium sized practice with a wide variety of good-class work, initiative and individual responsibility encouraged.—Please apply in writing giving full details to Box 1155. C/o A. & B. N.

CLED FER AND HICKS. 19. Cavendish Square.

in writing giving full details to non hose of 2237
\$\frac{\text{S}}{\text{B}}\text{N}\$.

\$\frac{\text{N}}{\text{N}}\text{N}\$.

\$\frac{\text{CHERRER}}{\text{N}}\text{ND}\$ HICKS. 19, Cavendish Square, W.1. (Tel.: Museum 1105) require immediately a number of architectural assis ants with imagination and initiative. The wo k is varied and covers research Laboratories, Offices, Housing and Schools. Five-day week. Salary by arrangement. [2235]

\$\frac{\text{A}}{\text{R}}\text{CHITECTS}\$ and Surveyors in the City of A RCHITECTS and Surveyors in the City of practice, require assistants. Good salary scale and Pension Scheme.—Apply, stating age, qualifications and experience, to Box 1101, c/o A, & B. N. [224]

TWO Architectural Assistants required of Intermediate R.I.B.A. standard for work on contemporary industrial buildings. Good salary and plenty of opportunity for initiative. London office.

— Write, giving details of salary, experience, to Howard, Souster & Fairbairn, 81, Piccadilly, W.J. 10008.

plenty of opportunity for initiative. London office.

Write, giving details of salary, experience, to Howard, Souster & Fairbairn, 81, Piccaddily, W1.

ARCHITECT'S Assistant required in Exeter office.

Box 0991, 7/o A. & B. N.

ASISTANT, intermediate standard, required.

Wimperis, Simpson & Fyffe, 61, South Molton Street, W.1. Mayfair 1277.

ASISTANT, preferably qualified, with some office experience, for important work in London. Salary 2700 - £1,000 according to age and experience.

Box No. 0896, c/o A. & B. N.

QUALIFIED Assistant required for private office in West End. Some office experience an advantage, but not essential.—Box 0654 c/o A. & B. N. 10200

NORMAN & DAWBARN invite applications from architectural assistants of inter. or higher standard. Interesting and varied programme of U.K. and overseas work. — Write to 5, Gower Street, London, W.C.I.. or phone Langham 5341. [0994]

ARCHITECTURAL Assistant required up to intermediate standard, Westminster Office. Pension and Bonus Scheme. 5-day week. — Write stating experience, age and salary required to Box No. 0114, c/o A. & B. N.

QUALIFIED Assistant required immediately — Apply in writing, stating age, details of practical experience and when available, to S. P. Jordan, AR.I.B.A., M.S.I.A. Dip.T.P., 11, King's Road, Sloane Square, S. W.3.

A RCHITECTURAL Draughtsman required by timber building manufacturers for their works in Kent for interesting work involving the design and development of timber structures. Good salary and excellent prospects for man capable of working on own initiative. Pension Scheme in operation.—Write, giving age, qualifications and experience to Box 1183, c/o A. & B. N.

B.C. requires Architectural Assistants, in London. For work on design of studio, transmitter and office premises. Candidates should be up to Intermediate or Final R.I.B.A., standard with preferably few years' office experience. Salary in scale f620-f830 or £725 - £960 according to qualifications and experience. Requests for application forms to Engineering Establ

SITUATIONS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

KNIGHT, FRANK & RUTLEY require junior BUILDING SURVEYOR capable specifying and supervising minor works. and dealing with maintenance repairs. Age 20-25. Pension scheme.—Apply in writing, stating salary required, to "B.S.," 20. Hanover Square, W.1. [2231]

QUANTITY Surveyor required for large Building Contract in the Birmingham area. Capable of working on own initiative on Site with Head Office supervision. — Write, stating age, experience and salary required to Box No. 1068, c/o A. & B. N.

SITUATIONS VACANT—cont.

EXPERIENCED Estimator required by timber building manufacturers for their works in Kent. Applicants should be fully conversant with general woodworking practice, particularly in respect of mass-production and should possess a general knowledge of building construction. Good salary and prospects, Pension Scheme in operation. —Write, giving age, qualifications and experience, to Box 1184, c/o A. & B. N. [2242]

SERVICES OFFERED

SURVEYS: Sites and Buildings.—Allerton Studios, 14, Maley Avenue, London, S.E.27. Gipsy Hill 3782.

WORK REQUIRED

FRENCH polishing, all types. Best work by experienced men at reasonable price. Estimates free. Satisfaction assured. — A. W. Marier, 10, Gillum Close, East Barnet. ENT 6473. [2183]

FOR SALE

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Birmingham 40. [2256]

JOINTLESS composition flooring in attractive colour range—quotations free.—Full particulars from the Liotex Asbestos Flooring Co. Ltd., 3. Corbetts Passage, London, S.E.15. (Dept. A), Bermondsey 434-2-3. [CAN-ITLE "— the liquid floor and wall coating for Canteens, Hospitals, Factorics, Abattoirs, Toilets, Garages, etc., withstands traffic. Cost 20% of lino. — Write Dohm Ltd., 167, Victoria Street, London, S.W.1. 14 factories pulverising — saving industry money.

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HARDCORE Walling Stone and Pitching delivered or collected from quarries at Fish Hill, near Broadway, Worcs., and Hornsicasow, near Bourtoe-on-the-Hill, Gios. — Apply to Ballie, Brind & Co., Ltd., Prudential Chambers, Banbury, Oxon. [0062]

RECONDITIONED ex-Army Huts & Manufactu Buildings. Timber, Asbestos, Nissen Type, Hall Type, etc. All sizes and prices. — Write, call or telephone, Universal Supplies (Belvedere) Ltd., Crab-tree Manorway, Belvedere, Kent. Tel. Eri.h 2948.

BLISTER Hangers, several for sale, with R.S.J. ends, at attractive prices for quick sale.—Mole and Bray Ltd., Stourport-on-Severn. [2206

CHALLIS, TURTON AND CO., LTD., Southview Avenue, Duddenhill Lane, Neasden, London, N.W.10. Tela: GLA 65357. Large number of Alis-Chaimers HD14 TRACTORS for SALE with or without equipments. Spares for above machines can be supplied from stock. Large quantities available. No Allis machine need stand for want of pages.

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PRIESTMAN Cub, 1942, Pet./Par. (Spare Engine), fitted Dragline & Bucket, in good working order. Can be seen working. £650 o.n.o. — EXCEAT BALLAST WHARF, Nr. Seaford, Sussex, Tel.: Eastbourne 4969.

SEARCH 3in. "Mud Marvel" Lift and Force Portable MUD PUMPS. Air-cooled Lister Diesel. Originally manufactured for our hire fleet, are now available for general sales. — WM. G. SEARCH, LTD., Whitehall Road, Leeds. Tel.: 639081.

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TALY, 14 days conducted tour, Milan, Verona, Venice, Bologna, Siena, Pisa, Fiesole, etc., September 2nd-16th. Good 2nd class hotels and coach in Italy, 55 gns "all-ia", — Details from Frederick Hill, r.R.I.B.A., 6/A, New Street, Birmingham, 3; or Worldways Ltd., 39-41, James St., London, W.1. Party limited to 25.

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FOR hire, Ruston - Bucyrus EXCAVATORS. 38RB, 33RB, 22RB and 19RBs. Any equipment. - A. E. Farr Ltd., Westbury, Wilts. Tel. 356.

MISCELLANEOUS

P.H. Plumbing and Heating.—90. Albert Street, London, N.W.1. GUL 7422, TUD 4579.

LET US BLAST THOSE TREE ROOTS and do your SITE CLEARING. — F. G. FLEMING AND CO., New Road, Northchurch, Herts. Tel.: Berkhamsted 1239.



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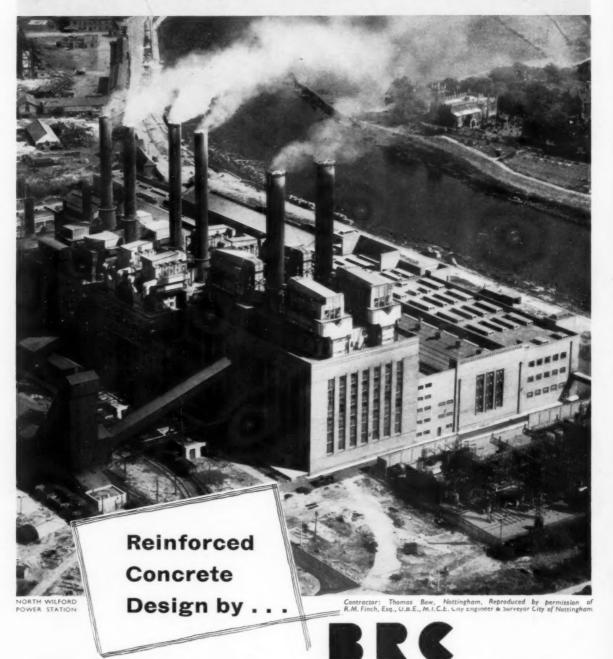
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